

Durham E-Theses

At-Taif city and Amirate, Al-Hijaz, Saudi Arabia : a geographical study.

Daghistn, Abd al-Majd Ism'l

How to cite:

Daghistn, Abd al-Majd Ism'l (1976) *At-Taif city and Amirate, Al-Hijaz, Saudi Arabia : a geographical study.*, Durham theses, Durham University. Available at Durham E-Theses Online:
<http://etheses.dur.ac.uk/1864/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

Academic Support Office, Durham University, University Office, Old Elvet, Durham DH1 3HP
e-mail: e-theses.admin@dur.ac.uk Tel: +44 0191 334 6107
<http://etheses.dur.ac.uk>

AT-TAIF CITY AND AMIRATE, AL-HIJAZ, SAUDI ARABIA

A Geographical Study

Abdel-Majeed Ismail Daghistani

The Graduate Society

Thesis submitted for the
Degree of Doctor of Philosophy,
University of Durham, September 1976

IN MEMORY OF
THE FOUNDER OF SAUDI ARABIA,
THE LATE KING ABDEL-AZIZ

ABSTRACT

At-Taif Amirate of Al-Hijaz, Saudi Arabia, the study area of this thesis, is a region manifesting great variability, in natural environment, in settlement and population, and in economic life. Saudi Arabia's vast wealth from oil has both reduced and enhanced this variability : which increases the necessity for research which attempts to picture both the present situation and current trends, identifying problems and seeking solutions, going beyond a superficial account based merely on elementary knowledge and experience.

In Part 1, which treats the natural environment, there is a discussion of the various relevant aspects of the study area's geology and structure, relief and geomorphology, climatology, water resources, soil, flora and fauna. Attention is focused on relationships between these aspects and human society and economy.

In Part 2, which treats settlement and population, an account of the city of At-Taif, the capital of the Amirate, is given. This is followed by a survey of the urban population, including patterns of composition and standards of living. The 'floating' population is also considered. Attention then turns towards the immigrant population; among other things, selected communities are studied. Rural population and settlement are also surveyed. Part 2 is concluded by an account of non-sedentary (semi-nomadic) population.

In Part 3, which treats economic life, agriculture is surveyed. Consideration is given, for example, to characteristics of land holding, types of farming, and irrigation. Commerce and industry are then reviewed : their parts in economy and society are indicated.

In Part 4, the focus is narrowed specifically to the minority groups within At-Taif city. The different groups are described, despite the absence of official census figures. The reasons for their initial migration and subsequent distribution within the city are discussed before concluding with a possible strategy for these minority groups.

The thesis concludes by indicating the generalities which have emerged from the work, and by giving recommendations for future development of the Amirate.

CONTENTS

	<u>Page</u>
List of Figures	i
List of Tables	v
List of Plates	x
Acknowledgements	xix
Introduction	xx
PART ONE : THE NATURAL ENVIRONMENT	
<u>Chapter 1</u> :	
Geology and Structure	1
Relief and Geomorphology	6
Climatology	12
Water Resources	31
Soil	50
Biogeography	53
PART TWO : SETTLEMENT AND POPULATION	
<u>Chapter 2</u> : The City of At-Taif	
Origin	60
Evolution	61
Quarters	75
Amirate Centre	76
Services	77
Amenities	96
Traffic	103
Water Supply	107
<u>Chapter 3</u> : Urban Population	
Data Sources	118
Population Growth	119
Population Distribution	124
Ethnic Affinities	125
Population Composition	126
Standard of Living	134
Floating Population	140
<u>Chapter 4</u> : Immigrant Population	
Growth of the Immigrant Population	147
The Composition of the Immigrant Population	148

	<u>Page</u>
The Attraction of Immigrants to At-Taif City	159
The Influence of Immigrants on the 'Host' Population and the Government Response	164
<u>Chapter 5</u> : Rural Population	
Saudi Arabia, Population Data	168
The Amirate of At-Taif, Population Data	169
Origins of the Rural Population and Tribal Social Cohesion	171
Population Composition	172
Standard of Living	176
Rural Settlement	179
Data Problems	179
Settlement Distribution	181
Settlement Size	181
Man-Settlement Relationship	184
<u>Chapter 6</u> : Non-Sedentary Population	
Saudi Arabia, Population Data	188
The Amirate of At-Taif	189
Definition of Non-Sedentary Population	189
Population Data and Distribution	192
Population Composition	193
The Problems Defined, and Possible Remedies	197
 PART THREE : THE ECONOMIC LIFE	
<u>Chapter 7</u> : Agriculture	
The Importance of Agriculture in Saudi Arabia	206
The Importance of Agriculture in At-Taif Amirate	207
Agricultural Area in the Amirate of At-Taif	208
Change in the Agricultural Area	210
Holding Characteristics	219
Labour	225
The Role of Farm Machinery	231
Types of Farming	232
Irrigation	248
<u>Chapter 8</u> : Commerce and Industry	
Commerce:	
The Role of Commerce in At-Taif Amirate	253
The Suq of At-Taif City	257
Distribution of Commercial Functions in the Suq	261
Commercial Streets	268
Commercial Functions beyond At-Taif City	269

	<u>Page</u>
Industry:	
The Position of Industry in At-Talf Amirate	271
Current Industrial Activities	273
Location of Industrial Establishments	277
Labour	278
 PART FOUR : A CASE STUDY	
<u>Chapter 9</u> : Minority Groups in At-Talf City	283
Origin of Minority Groups	285
Reasons for the Presence of Minority Groups in At-Talf City	293
Resultant Patterns in At-Talf City	300
Detailed Examination of Minority Group Distribution	309
Comments on a Strategy for Minority Groups in At-Talf City	325
 Conclusion	332
 Appendix : The Questionnaire - English and Arabic Versions	336
 Bibliography of Works on At-Talf Amirate	338

LIST OF FIGURES

<u>Figure</u>		<u>Following Page</u>
1	Location of the Study Area (At-Taif Amirate)	xxi
1.1	Major Geological Regions of Saudi Arabia	1
1.2	Surface Geology of the Amirate of At-Taif	1
1.3	Topography of At-Taif Amirate (Selected Contours)	7
1.4	Temperature (Monthly mean maximum and mean minimum in °C)	19
1.5	Saudi Arabia : Mean Annual Rainfall, 1967- 71	25
1.6	Distribution of Rainfall, At-Taif Amirate, 1964-73	25
1.7	Drainage Network of At-Taif Amirate	36
1.8	Thickness of Alluvial Deposits, Wadi Liyyah, between Bilad Auf and Ar-Rashadeen	51
1.9	Surface Materials, At-Taif City	52
2.1	The Site of Pre-Islamic At-Taif	62
2.2	Field Sketch of At-Taif Town, by the Artillery, September 25th, 1916	65
2.3a	Contours in Metres above Sea Level (transparent overlay)	68
2.3	The Growth of At-Taif City .	68
2.4	Urban Growth	74
2.5	Quarters of At-Taif City	76
2.6	Location of Selected Offices of Government Ministries and Departments in At-Taif City	78
2.7	Area of Influence	78

<u>Figure</u>		<u>Following Page</u>
2.8	Location of Schools, Hotels and <u>Bazans</u> in At-Taif City	86
2.9	Loaded Water Trucks by the Ains and Wells Department, At-Taif City	111
3.1	Population Density in the City of At-Taif, 1962-63	124
3.2	Age Structure of the Population of the Quarters of At-Taif City, 1962-63	126
3.3	Age-Sex Pyramid of Saudi Population in At-Taif City, 1966	128
4.1	Age-Sex Pyramid of Non-Saudi Population in At-Taif City, 1966	148
5.1	Distribution of Tribes in the Amirate of At-Taif	171
5.2	Rural Settlements in At-Taif Amirate	181
5.3	Size of Rural Settlements in the At-Taif Amirate	182
6.1	Semi-Nomadic Population Distribution in At-Taif Amirate, 1962-63	193
6.2	Routes used by the Semi-Nomads in the At-Taif Amirate	201
7.1	Agricultural Sub-Areas in the Amirate of At-Taif	208
7.2	Contrasting Morphologies in Agricultural Holdings in the Amirate of At-Taif	221
7.3	Road Network of the Amirate of At-Taif	241
7.4	Distribution of <u>Hemas</u> (Land reserved for Grazing) in the Amirate of At-Taif, 1974	246
8.1	Distribution of Selected Commercial Functions in the Suq of At-Taif City, 1973	261

<u>Figure</u>		<u>Following Page</u>
8.2	Distribution of Commercial Functions Along the Western Half of Ash-Shohada Street, 1973	268
8.3	Distribution of Commercial Functions in Al-Hawiyah Settlement, 1973	269
8.4	Distribution of Commercial Functions in the Summer Resort of Al-Hada, 1973	270
8.5	Distribution of Industrial Establishments Along the Western Half of Ash-Shohada Street, 1973	278
9.1	Distribution of Minority Groups, At-Taif City 1975-76	284
9.2	Origin of Minority Group Householders, At-Taif City 1975-76	288
9.3	Migration of Minority Group Householders to At-Taif City from Six Source Areas 1960-1975	289
9.4	Origin of Regional Minority Group Householders by Reasons for Presence in At-Taif City	297
9.5A	National Characteristics of Minority Groups, At-Taif City, 1975-1976	300
9.5B	Ethnic Characteristics of Minority Groups, At-Taif City, 1975-1976	300
9.5C	Average Monthly Income in Pounds Sterling per Householder, Minority Group Areas, At-Taif City, 1975-1976	300
9.6	Distribution of Householders and Income Among Eight Ethnic Groups in At-Taif City 1975-76	303
9.7	Generalizations of Internal Structure of Cities (a) Concentric Zone Theory (b) Sector Theory (c) Multiple Nuclei	304

Figure

Following
Page

9.8	Schematic Structure of At-Talf City, 1976	307
9.9a	Average Land Values per Square Metre, 1976	308
9.9b	Average Rent Values per Square Metre, per Month 1976	308
9.10	Movement of Nigerian and Mall Immigrants and Coastal Asir Migrants, At-Talf City	312
9.11	Sub-divisions within Migrant Areas 1 - 5, At-Talf City, 1975-76	323

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.1	Scheme of Surface Geology, At-Taif Amirate	2
1.2	Basic Information on Meteorological Stations, At-Taif Amirate, 1973	16
1.3	Sky Conditions at Al-Hawiyah Airport, 1966-72 Average	18
1.4	Mean Solar Radiation ($\text{gm cal/cm}^2/\text{day}$), At-Taif City General Station, 1970-73	21
1.5	Relative Humidity %, 1966-73 (a) Al-Hawiyah Airport (b) At-Taif City General Station	24
1.6	Maximum Wind Speeds (km/hour) at Al-Hawiyah Airport (1968-73) and At-Taif City General Station (1973)	29
1.7	Mean Wind Speeds (km/hour) at Al-Hawiyah Airport and At-Taif City General Station, 1968-73	30
1.8	Prevailing Wind Directions at Al-Hawiyah Airport : Numbers of Days with given Conditions, 1969-73	30
1.9	Comparison of Chemical Characteristics of Water from Wadi Wiji with WHO Standard	35
1.10	Annual Flood Volume (m^3) in Three Major Wadis, 1964-69	45
1.11	Peak Flow Magnitudes (m^3/sec) in Three Major Wadis, 1964-69	47
1.12	Duration of Flow (hours) in Three Major Wadis, 1964-69	48
2.1	Growth of At-Taif's Municipality Budget, Projects Section during the Period 1965-66 and 1972-73	70
2.2	Selected Offices of Government Ministries and Departments in At-Taif City	78

TablePage

2.3	Percentage of Illiterates According to Sex in the Cities of Makkah, Jeddah and Ar-Riyadh, 1966	79
2.4	Male Schools Data (1970-71) for the City of At-Taif	81/ 82
2.5	Female Schools Data for the City of At-Taif (1970-71)	85
2.6	Hospital Facilities in At-Taif City, 1971	89
2.7	Number of Out- and In-Patients at King Faisal Hospital in At-Taif City	91
2.8	Animals Slaughtered Daily in the City of At-Taif Meat Markets (1971)	92
2.9	Data on Coffee Houses located within the Core of At-Taif City (September 1971)	97
3.1	Population Growth in At-Taif City, 1962-63 - 1971	120
3.2	Percentage of Birth Place per Householder in Three Selected Cities in 1966 and 1971	123
3.3	Percentage Distribution of Population of At-Taif City by Marital Status, 1966	133
3.4	Monthly Income per Household in the Cities of At-Taif, Makkah and Jeddah, 1971	135
3.5	Number of Crimes in Two Selected Quarters (Karwah and Ash-Sharqiyah) in the City of At-Taif	137
3.6	Number of Beneficiaries of the Social Security System in Selected Quarters in the City of At-Taif, August 1971	140
3.7	Monthly Income per Household of 'Floating' Population in the City of At-Taif, Summer 1971	143
4.1	Number and Percentage of Public-owned Establishments according to Type of Ownership in Three Selected Cities, 1967	161

<u>Table</u>		<u>Page</u>
4.2	Number and Percentage of Saudi and non-Saudi Employees in Public-owned Establishments in Three Selected Cities, 1967	162
4.3	Saudi and non-Saudi Manual Workers of Seven Selected Occupations in At-Taif City, 1968	163
4.4	Distribution of Saudi and non-Saudi Employees in At-Taif City Public-owned Establishments; by Educational Status/Level, 1968	163
6.1	Percentage of Slaughtered Animals by Kind in Six Selected Cities and Towns between 11th April 1967 and 21st March 1971	199
6.2	Percentage of Building Permits issued by Five Selected Municipalities according to Kind of Construction Material between 9th March 1970 and 3rd February 1973	203
7.1	Size (ha) and Percentage of Cultivated and Uncultivated Area in the Amirate of At-Taif in 1962-63 and 1967	211
7.2	Distribution of Holdings by Size (ha) in Area of Influence of Agricultural Offices in the Cities of At-Taif, Makkah-Jeddah and Al-Madinah, 29th October 1962 to 25th January 1963	220
7.3	Distribution of Holdings by Type of Tenure, in the Area belonging to Agricultural Offices in the Cities of At-Taif, Makkah-Jeddah and Al-Madinah, 29th October 1962 to 25th January 1963	224
7.4	Distribution of Holding Owners' Families according to Size in Area of Influence of Ministry of Agriculture and Water Office in At-Taif City, 29th October 1962 to 25th January 1963	227
7.5	Hectares per Crop in the At-Taif Agricultural Sub-Areas, 1967	235

<u>Table</u>		<u>Page</u>
7.6	Characteristics of <u>Hemas</u> (Land Reserved for Grazing) in the At-Taif Amirate	247
8.1	Growth in the Number of Establishments and their Workers in At-Taif City, 1960-71	257
8.2	Distribution of Establishments according to Employment Size in At-Taif City, 1967 and 1971	263
9.1	Distribution of Minority Group Householders by Place of Birth, At-Taif City, December 1975 to February 1976	287
9.2	Distribution of Minority Group Householders by Type of Origin, Area of Origin, and Period of Migration, At-Taif City, c 1960-1975	289
9.3	Distribution of Minority Group Householders by Marital Status, At-Taif City, December 1975 to February 1976	292
9.4	Distribution of Minority Group Householders by Age, At-Taif City, December 1975 to February 1976	294
9.5	Distribution of Minority Group Householders by Motives for Presence and Area of Origin, At-Taif City, December 1975 to February 1976	
	(a) Broad Classification of Motives	295
	(b) Detailed Breakdown of Motives	296
9.6	Distribution of Minority Group Householders by National and Ethnic Characteristics, At-Taif City, December 1975 to February 1976	301
9.7	Estimated Average Monthly Income per Householder, Minority Group Areas, At-Taif City, December 1975 to February 1976	303
9.8	Distribution of Minority Group Married Householders by Pre-Marriage Relationship with their Wives, At-Taif City, December 1975 to February 1976	316
9.9	Distribution of Minority Group Householders by Occupational Structure, At-Taif City, December 1975 to February 1976	318

Table

Page

9. 10	Distribution of Minority Group Householders by Reason for Presence in their Areas, At- Taif City, December 1975 to February 1976	321
9. 11	Distribution of Minority Group Householders by Preference to Move to Another Area if they had the Choice, At-Taif City, December 1975 to February 1976	322

LIST OF PLATES

<u>Plate</u>		<u>Following Page</u>
1.1	Andesite dykes intruding into granodiorite. Near summit of Jabal Kara, north-west of At-Taif city	2
1.2	Contorted amphibolite schist. Jabajib, north-west of At-Taif city	2
1.3	View looking south-west from Ash-Shafa. This exemplifies the relief of the uplands, showing summits rising above relatively level surface	8
1.4	(a) Rocks in wadi course, Wadi Wiji, downstream of At-Taif city (b) Wadi course, Wadi As-Sirr, south-east of At-Taif city. Note smaller size of loose material on bed	10
1.5	Sands and gravels in wadi course, Wadi As-Sirr, east-south-east of At-Taif city. Note conglomerate on the low bank	11
1.6	The Plain at Rokbah. This shows the flatness of this section	11
1.7	Roof equipped with several gutters. Arafat Hotel, At-Taif city	28
1.8	Wide flood gates. As-Solaiman's orchard, Jabraha on Wadi Wiji	28
1.9	"Its tributaries - especially Jabajib - are well developed because of high runoff, resulting from the low permeability of the local schists. Alluvial deposits are very rare"	36
1.10	Cultivation in the tributary mouth, Wadi Al-Qaim, north of At-Taif city	42
1.11	Wadi Mihrim near Al-Lawamiyah village	42
1.12	Damage caused by Wadi Wiji flood, At-Taif city (Courtesy An-Nadwah daily newspaper of Makkah, no 2806, 27th April 1968)	49

<u>Plate</u>		<u>Following Page</u>
1. 13	Illicit removal of trees in process. The acacia will be removed when dry. Wadi Masarraah, north-west of At-Taif city	55
1. 14	Illicit removal of trees. The acacia has been notched and is thus a candidate for overthrow. Kamlah, north-east of At-Taif city	55
1. 15	Firewood auction, At-Taif city, 1971	55
2. 1	"Boundaries between quarters extend from either one side of a street to a party wall of two buildings" In the latter case, the building to the right belongs to Fooq quarter while the one to the left belongs to Asfal quarter	75
2. 2	"The <u>mirkaz</u> (bed-like seat) in coffee houses acts as a seat in day time and bed at night" King Saud Street, western side	75
2. 3	"They differ from traditional coffee houses by having ordinary chairs (no <u>mirkaz</u>), lawns, and beds of flowers." Najmah modern coffee house, King Saud Street	99
2. 4	"The city core has its traditional <u>barhah</u> , i. e., square." Asfal quarter near Al-Khamees Lane	99
2. 5	"Open lands are rapidly disappearing, Hawaya and Shobra were among the last to be sold." Planned plots for sale in Hawaya sub-quarter, 1969, December	100
2. 6	"Barbed wire was added to iron fences to protect flowers such as in Al-Haraj square's roundabout."	101
2. 7	"Additional damage is caused by rain." King Saud Street, western side	101
2. 8	"Where the Municipality has provided pavements for, basically, pedestrians, it is common to see cars parked on them," King Saud Street, eastern side	106

<u>Plate</u>		<u>Following Page</u>
2.9	"or at least, a row of fruit sellers' hand-carts." Ash-Shohada Street, western end	106
2.10	"Dual carriageway islands are used, for example, as sites for a tripod crane of the opposite vehicle repairs shop." Al-Jaish Street, northern end	106
2.11	"Large numbers of sheep and goats are constantly disturbing traffic." King Saud Street, western side	106
2.12	"They were once extremely important, especially if one takes into account the number of horizontal beams which supported the pulley. This shows former pressure of consumers and the quantity of water available." Quarter of Old Ash-Shohada	108
2.13	"There are also some 84 sites in and around the city which are supplied freely by water trucks. There water is consumed by poor people or drought victims." Sub-quarter of Wadi An-Naml	110
2.14	"The only improvement to this means of supply is that buckets have been replaced by taps to prevent pollution." Quarter of As-Solaimaniyah	111
2.15	"They do this just to avoid a long queue that may last for several hours." Wadi Wiji within At-Taif city	111
2.16	"One result is that material is being deposited in the low quarters which in due course gradually raises the level of the streets." Quarter of Asfal	115
2.17	"High areas, on the other hand, are being eroded and gradually lowered." King Saud Street, looking east	115
3.1	"The poor dwellings match the general appearance of the quarters with their unclean streets where greenery is absent." (Courtesy Town Planning Office, Jeddah)	135

<u>Plate</u>		<u>Following Page</u>
3.2	"Extra cars are accommodated in specially provided tents. "	135
3.3	"Clean asphalted streets with pavements and trees enrich the surroundings of these villas. " (Courtesy Town Planning Office, Jeddah)	136
3.4	"This differentiation may be manifest in a small way, from, for example placing no barbed wire to protect plants and flowers on roundabouts. " (Compare it with Plate 2.6, Chapter 2)	136
3.5	"However, it is true to say that the city core with surrounding quarters, in addition to parts further east, are common places for wandering flocks of goats. "	138
3.6	"These animals are kept during the night in small sheds attached to buildings. "	138
3.7	"This need has prompted local architects to reserve space underneath outdoor stairs for their accommodation. "	138
3.8	"If, however, it applied to non-Saudis, figures for the eastern quarters could be at least doubled, as there are here hundreds of poor foreign shantymen. "	140
4.1	"Accordingly, the bulk of these people work . . . in leather and rubber works . . . "	153
4.2	"As regards their means of earning, most of these people work in their homes producing in particular head-caps . . . "	153
4.3	"Early settlers live mainly in As-Salamah quarter in tin huts engulfed by cement block walls. "	155
4.4	"The new-comers, on the other hand, live in more than 200 tin huts and some 60 straw huts in Wadi An-Naml : a sub-quarter of New Ash-Shohada. "	155

<u>Plate</u>		<u>Following Page</u>
4.5	"Their women are nut-sellers . . ."	156
4.6	"Their men, on the other hand, work as . . . tin hut builders . . ."	156
4.7	". . . and barbers."	156
4.8	"These people are engaged in every imagin- able sort of activity - water carriers, . . ."	158
4.9	". . . sellers of water for ablution, . . ."	158
4.10	". . . and washermen."	158
5.1	"They are clearly below working age and thus inactive, apart from very limited contribu- tions such as providing water for household use." Near Al-Wahat settlement, south-west of At-Taif city	174
5.2	"Their women are seen with the herds." Near the settlement of Al-Wahat, south-west of At-Taif city	174
5.3	"Unlike men, they spend their leisure hours spinning."	174
5.4	"The situation, however, is ameliorated for those rural dwellers with land near the city of At-Taif, such as Oodah on its southern fringe." Note the boundary posts which delimit plots for urban development, and the deserted well and pond	177
5.5	"On the other hand, distant holdings are left deserted." The presence of a well and pond in the foreground indicates previous agricultural use	177
5.6	"The relief (more than one thousand metres in height) offers rich natural scenery with high mountains, deep wadis and open plains." (a) Jabrah, north-east of At-Taif city (b) Wadi Jabajib, north-west of At-Taif city (c) Ash-Shafa, south-west of At-Taif city	179

<u>Plate</u>		<u>Following Page</u>
5.7	"Mountainous parts have also provided protection for the inhabitants from outsiders and enemies." (a) A settlement near Wadi Thamalah, south-east of At-Taif city (b) A settlement near Akrab, north-east of At-Taif city	181
5.8	"Al-Hawiyah is a summer resort for many members of the royal family." (Courtesy Town Planning Office, Jeddah)	183
6.1	"The <u>ain</u> of Akrab serves as a rendezvous for these people."	191
6.2	"As a result, the high demand for the produce of the semi-nomads has made them concentrate more on sheep herding, though goats and camels are still kept." (a) Near the settlement of Al-Wahat, south-west of At-Taif city (b) Near the <u>ain</u> of Akrab, north-east of At-Taif city	198
6.3	"The Ash-Shararat tribe of north-western Saudi Arabia was brought here for safety, but since the land is hospitable and there is more Government help, such as free delivered water, they have remained here."	201
7.1	"The landscape of Al-Jal, however, is still disturbed by huge open pits."	216
7.2	"After all, it will cost them nothing but operating a pump to fill waiting water-trucks." Wadi Wijj, upstream of At-Taif city	217
7.3	Cultivation of vegetables. (Note sharecropping labourers). Al-Jefejef on Wadi Wijj, downstream of At-Taif city	229
7.4	Two views of a threshing place. Al-Lawamiyah village on Wadi Mihrem, north-west of At-Taif city	236

<u>Plate</u>		<u>Following Page</u>
7.5	Earth roads in At-Taif Amirate (a) The road to upper Wadi Thamalah (b) The road to Al-Wohait on Wadi Wijj	241
7.6	Sacks of poultry manure offered for sale by a poultry breeding station near At-Taif city	242
7.7	Heaps of sawdust mixed with poultry man- ure on ground ready for ploughing	242
7.8	As-Samallaqi Dam, downstream face	249
7.9	Masarrah Dam, upstream face	250
7.10	Building a dam. Two parallel walls are built first, and the size of stones becomes smaller towards the centre of the dam (Shoehorn gives scale)	251
7.11	Space between the two walls is filled with masonry rubble	251
8.1	Khan Al-Awkaf, an example of the traditional suq	260
8.2	Khan Al-Mofti, an example of the modern suq	260
8.3	"Their goods, along with their customers, require no wide frontage or fine display". Khan Al-Kadhi	265
8.4	"It is quite acceptable, for example, to dis- play on the walls of the opposite building." Opposite Khan Al-Kadhi	265
8.5	"Part of the stock is kept outside the shop, because this is also a means of display and attraction." Lane of cutlery and china sellers	265
8.6	Lane of date sellers	265
8.7	Pedlars and pavement traders (pp 266-267) (a) sticks and walking sticks	267

<u>Plate</u>		<u>Following Page</u>
8.8	(b) cigarettes and matches	267
8.9	(c) water	267
8.10	(d) <u>lahoh</u> , a sort of unbaked bread of south-west coastal Saudi Arabia	267
8.11	(e) aromatic plants	267
8.12	(f) haberdashery	267
8.13	Skins in Barhat Bin Fitais, At-Taif suq	274
8.14	"Wool removed from hides provides the raw material for weaving and spinning (see Plate 5.3)." Barhat Bin Fitais, At-Taif suq	274
8.15	Making mats from palm leaves. Barhat Bin Fitais, At-Taif suq	274
8.16	Products of a blacksmith. Barhat Bin Fitais, At-Taif suq	274
8.17	Baked clay water-jars. Barhat Bin Mosmar, At-Taif suq	275
8.18	Zinc water containers. As-Solaimaniyah quarter	275
9.1	A disused modern air-conditioned shopping centre on the north-western fringe of At-Taif city	307
9.2	Building has taken place behind the cover of a flattened tin wall. Note the community water tanks	310
9.3	Structures which have encroached upon the asphalt road have been bulldozed	310
9.4	The proximity of two mosques in Bin Sowailem. Note bundles of firewood for sale, and the nature of the houses at the front	310

<u>Plate</u>		<u>Following</u> <u>Page</u>
9.5	(a) and (b) Living conditions above in area 9, and below in area 12. Note also below the community water tanks	312
9.6	Compare this photo with Plate 9.4 of area 3; the above illustrates the shanty-like appearance of the edges of the area	324
9.7	Discarded nutshells in area 12	324

ACKNOWLEDGEMENTS

This work has been carried out with the financial support of the University of Ar-Riyadh, to which I proudly belong.

In Saudi Arabia, many officials, friends and relatives have kindly given different sorts of assistance, for which they deserve my sincere gratitude. Special thanks are due for kindness and help to the Amir of the Amirate of Makkah District, HRH Fawwaz Ibn Abdel-Aziz; to his Deputy (then), HRH Ahmad Ibn Abdel-Aziz; to the Amir of the Amirate of At-Taif, Naser Bin Moammar; to his Deputy, Mohammad Bin Heraib. I am grateful to the Manager of the Town Planning Office in Western Province, Saeed Farisi, and to his staff for valuable help. I am also indebted to Foad Kattan, of the Ministry of Petroleum and Mineral Resources, for assistance in obtaining maps of the study area. I am also grateful to my father, Ismail Daghistani, and my brother, Abdel-Aziz Daghistani, for constant provision of fresh material for this work.

In Britain, I must acknowledge particularly the help received from my supervisor, Professor W B Fisher, through guidance, encouragement, constructive criticism, and kindly concern. I am also grateful to several members of staff, particularly Dr D Pocock, secretaries, technicians and fellow research students in the Department of Geography, University of Durham, and to other friends in Durham and elsewhere. Their kindness and hospitality have made me forget much of my homesickness.

Finally, and above all, my sincere thanks and indebtedness to the Almighty, who has provided me with health, patience and strength to accomplish this work.

A-MID

INTRODUCTION

Until the mid-1940's, Saudi Arabia was known to the outside world mainly on account of its holy places, in Makkah, Al-Madinah and their surroundings. Her influence, such as it was, was limited to Arab and Moslem countries. Soon after the Second World War, this started to change, and the country now holds an outstanding place among the nations of the world. Two factors may be singled out as chiefly responsible : firstly, the great wealth from oil, and secondly, the wise and judicious policy of the Government.

Becoming rich within a relatively short period of time may lead to both beneficial and insidiously harmful effects. The new wealth will help greatly if it is used correctly and wisely, but it may also harm, if used wrongly and improperly, especially if it causes erosion of the country's character, traditions and beliefs. Accordingly, to spend money in the right way and to tackle and solve important problems, it is essential to understand the people, their tastes and values, and to know the land on which they are living. To put it another way, Saudi Arabia, like any other country, has to be studied and investigated thoroughly if it is to be developed properly. Construction of the base and the foundation matter most in both the short and the long run. Hence this study has been carried out, in an attempt to supply those engaged in building the country with one reliable, solid and well-cut stone. Although just a single stone, nevertheless it still makes a contribution, for as the Arabic proverb says : "It is drops of rain that form torrential wadis".

At-Taif Amirate, the study area of this thesis, is an administrative unit belonging to the Amirate of Makkah District, with an area of 7,290 sqkm. It is situated between $21^{\circ}00'N$ and $22^{\circ}00'N$, and between $40^{\circ}15'E$ and $41^{\circ}15'E$, in the southern portion of the territory of Al-Hijaz, which is also known (although this is the subject of some disagreement between Government ministries) as the Western Province of Saudi Arabia (Fig 1). Its capital and the leading settlement, which is in fact the only urban area in the Amirate, is also called At-Taif. It is located at 1,660 m above sea level. On account of its altitude, it has become a summer resort for the inhabitants of Saudi Arabia. Furthermore, during the summer season, the King, Crown Prince, Council of Ministers and their offices leave Ar-Riyadh and come to At-Taif. Another important aspect is its relatively fertile agricultural land, which supplies the cities of Makkah and Jeddah as well as the city of At-Taif itself. The Amirate is also a supplier of livestock and, more recently, of poultry.

This work is based largely on personal investigation and observation carried out during three field trips to Saudi Arabia. On each visit, two months at least were spent in the study area. Born and bred in the Amirate, the writer has already intimate cultural experience of the study area. This knowledge has been supplemented by a planned field project, entailing work both in the urban area and in the rural and semi-nomadic areas. The writer was loaned a jeep by the Office of At-Taif Amirate, together with a driver (from a local tribe) and a guide, who is not only a body-guard of the Amir, but also a Sharif. His position and rank, and the signs of "At-Taif Amirate" on the jeep doors, freed the field project

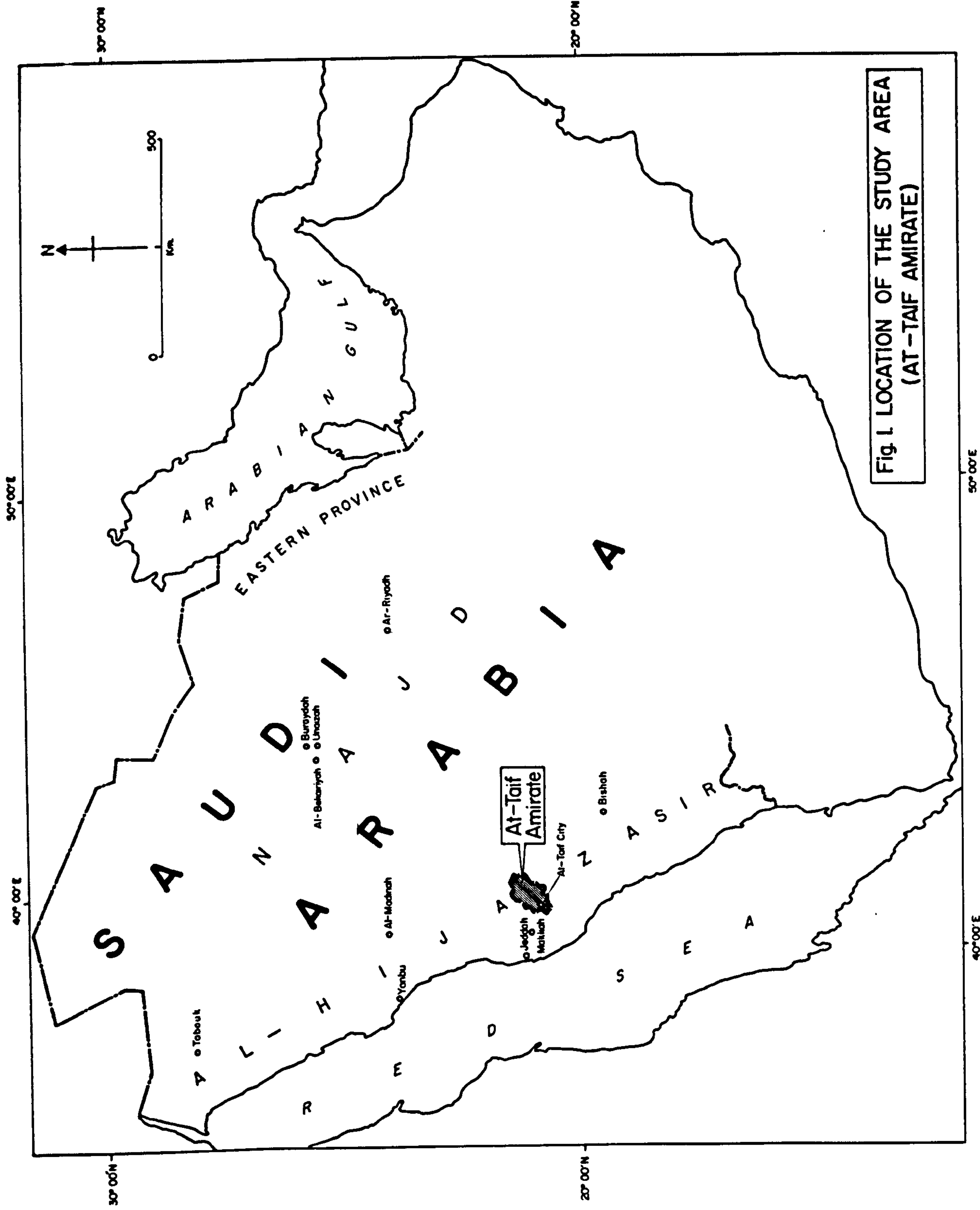


Fig. 1. LOCATION OF THE STUDY AREA
(AT-TAIF AMIRATE)

from any disturbances or difficulties. Moreover, the writer was greatly aided by letters of recommendation to all Government offices in the Amirate. We were well received by everyone we met.

Written material on the study area is scarce, and often elementary, repetitive or unreliable. Indeed, very few writings can be regarded as authoritative, whether as specific reports or general works. The writer reviewed the available literature collecting interesting or valuable material. A bibliography of works consulted which are directly related to the study area is appended to this thesis. The language of works not in English has been stated. The titles of some references have not been translated for fear of introducing ambiguities. A result of the scarcity of written material is the small number of references in this work. Indeed, this lack of material has meant that the thesis is based mainly on first-hand knowledge.

In the field, a portable tape-recorder proved useful, but taking notes of conversations was usually more appropriate, because the presence of the tape recorder often disturbed or even inhibited people who were being interviewed. Photographs, although costly, have been taken extensively, not only to provide illustration, but also to support statements which may seem either exaggerated or fictitious. A continuous supply of fresh information on recent events, and of new data have helped to keep this work as up to date as possible. The 16 air-photo maps of At-Taif Amirate made by Fairey Surveys have greatly helped the writer, both during the field work and thereafter. One remarkable outcome is that it has become possible, perhaps for the first time in Saudi Arabia, to demarcate with considerable accuracy

the boundaries of an administrative area. This has been achieved by using these maps in conjunction with the document on Names of Towns, Villages and Heads of Tribes, produced by the Office of the Amirate of At-Taif.

Finally, some comments should be made on the methodology adopted in studying the area. The aim has been to supply an explanatory description of a particular region, At-Taif Amirate, which has never been the subject of such work, in a way that would ". . . neither drown the reader in detail, nor leave him feeling that he still has no clear image of the region." * A framework has been provided by the distinctions between natural environment, settlement and population, and economic life. Attention has been focussed on concrete and important problems; factors relevant to particular problems are identified and solutions sought. The small volume, short extent, and low reliability of the data given in this thesis would have minimised the value of any attempt to use statistical analysis. Until quantitative data are more readily available, much of any work must be devoted simply to presenting an overall picture of historical legacies, present situations and current trends.

A phonetic system of transliterating proper names has been adopted. This should encourage correct pronunciation, and it will not clash with present official work on standardising place-names in Saudi Arabia.

* Paterson, J H, Writing Regional Geography , in Progress in Geography, edited by Board, C, Chorley, R J, Haggett, P, and Stoddart, D R, vol 6, page 11, London, 1974

It is hoped that this work may measure up to the words of Professor Mead : "Within the hive of geographical studies, those who elect to pursue area studies may add proportionately less to the waxen structure of the comb, but they will continue to contribute a fair quota of honey to fill its cells. " *

* Mead, W R, Geography and Area Studies , in Trends in Geography, edited by Cooke, R V, and Johnson, J H, page 251, Oxford, 1969

PART ONE

THE NATURAL ENVIRONMENT

CHAPTER 1

GEOLOGY AND STRUCTURE *

General Outline of the Geology of Saudi Arabia, and At-Taif

Amirate

Saudi Arabia may be divided into two major geological regions (Fig 1.1). The first, the Arabian shield, covers the entire western part of the country and is 610,000sqkm in extent (that is, 27% of the total national area). The shield consists mostly of igneous and metamorphic rocks of Precambrian age. The second region, which covers the remainder of the country (1,640,000sqkm in extent, or 73% of the total national area), consists of younger sedimentary rocks, Palaeozoic to Tertiary in age, and of unconsolidated deposits of Quaternary age. These younger rocks adjoin and overlies the ancient rocks of the shield.

At-Taif Amirate, the study area of this thesis, occupies part of the central section of the Arabian shield. Apart from Quaternary deposits and basalt of Pliocene-Quaternary age, the rocks outcropping in the Amirate are wholly of the Precambrian (Fig 1.2, Table 1.1). Intense heat and pressure experienced during successive periods of crustal instability have resulted in considerable disturbance of the rocks, which are highly folded, faulted and compressed, and now include many intrusions (see Plates 1.1 and 1.2 for examples).

* Sources for the section on geology and structure are references 1, 2, 3, and 4. (References are listed in full at the end of each Chapter).

Fig. I.1 MAJOR GEOLOGICAL REGIONS OF SAUDI ARABIA

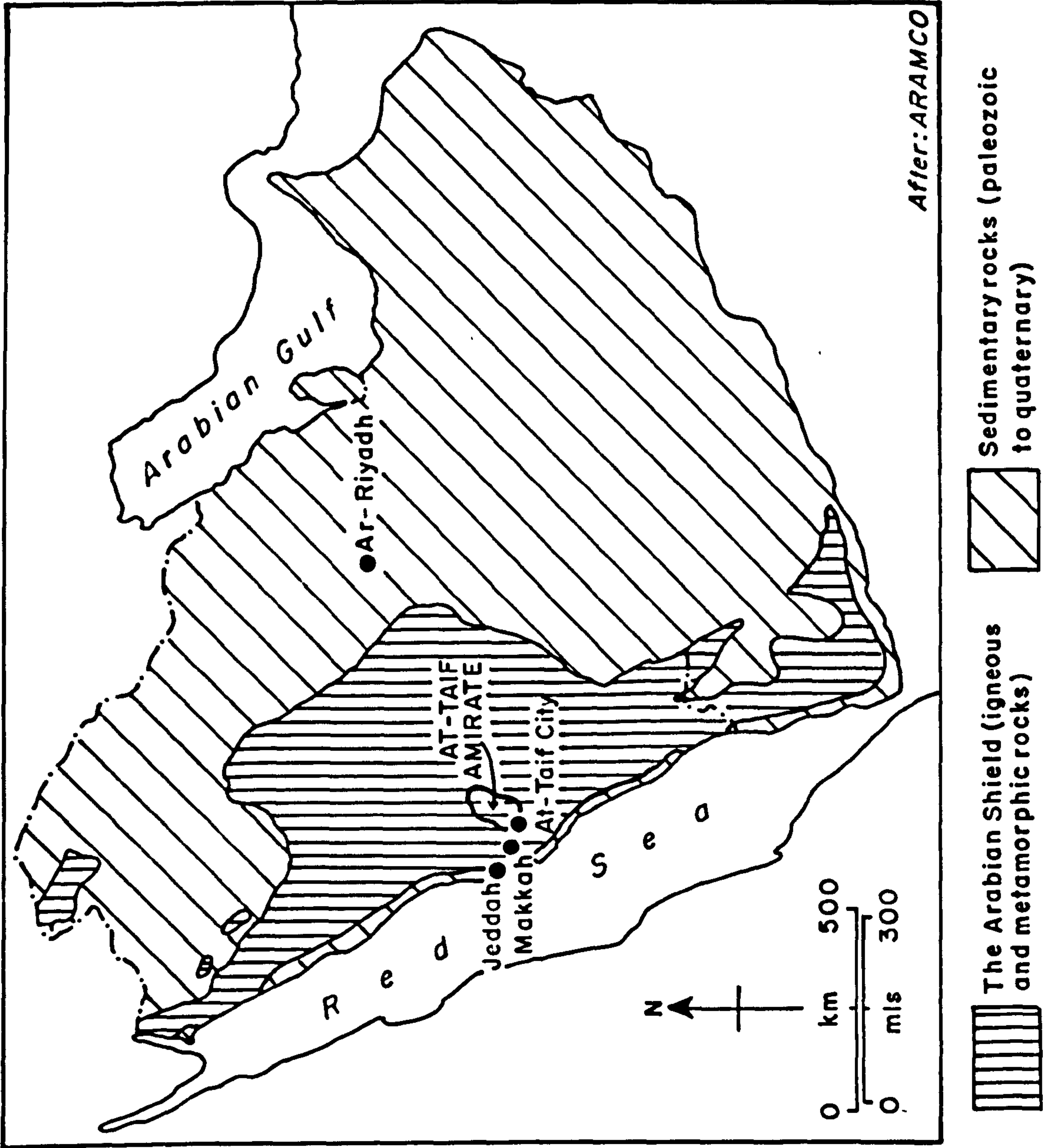
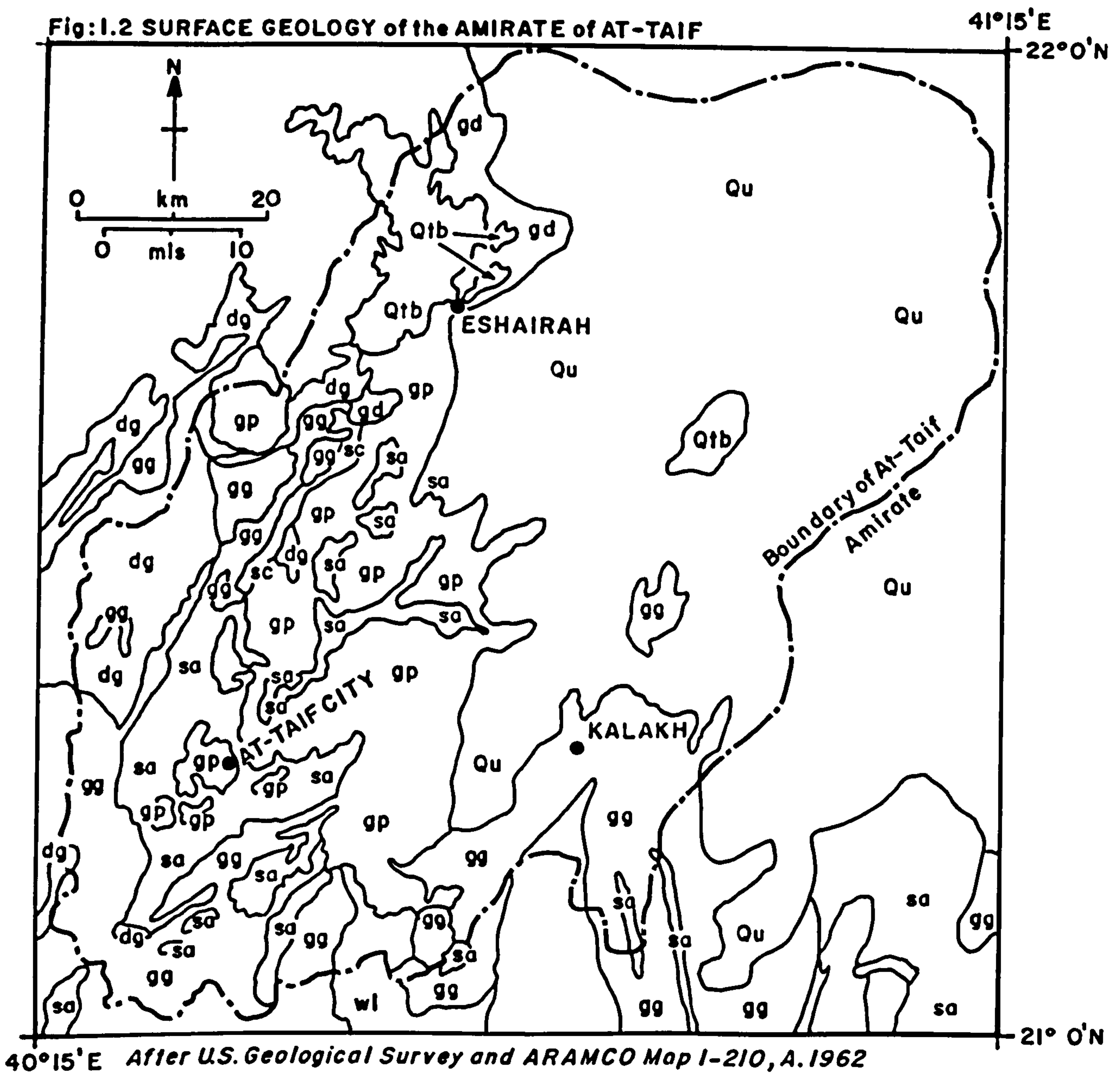


Fig:1.2 SURFACE GEOLOGY of the AMIRATE of AT-TAIF



40°15'E After U.S. Geological Survey and ARAMCO Map I-210, A. 1962

Qu: Sand, gravel, silt and clay

Qtb: Basalt

gp: Granite

gg: Granite and granite gneiss

dg: Diorite and granodiorite

gd: Andesite, dolerite, slate, greenstone, conglomerate, rhyolite and andesite porphyry

sc: Sericite and chlorite schist

sa: Amphibolite schist

wl: Wadi Lith series

TABLE 1.1

Scheme of Surface Geology, At-Taif Amirate

Geological System	Rock Unit	Notes	Date (million years before present)	Map Symbol
<u>Quaternary</u>	Gravel, sand, silt and clay		0-2	Qu
<u>Pliocene to Quaternary</u>	Basalt		c.2	QTb
<u>Precambrian</u>	Granite	Red or pink un-metamorphosed alkalic to per-alkalic granite	530	gp
	Granite and granite gneiss	Grey, largely derived from granitisation of schists and volcanic rocks	1,000	gg
	Diorite and granodiorite	Often gneissic		dg
	Andesite, dolerite, slate, greenstone, conglomerate, rhyolite and andesite porphyry	Much intruded by granite and cut by dike swarms of rhyolite and dolerite		gd
	Sericite and chlorite schist	Mostly derived from sediments		sc
	Amphibolite schist	Derived largely from greenstone and keratophyre		sa
	Wadi Lith series	Metamorphic complex of metadiorite, meta-gabbro and amphibolite		wl

Source : US Geological Survey and the Arabian American Oil Company, Map 1-210 A , 1962



Plate 1. 1

Andesite dykes intruding into granodiorite. Near summit
of Jabal Kara, north-west of At-Taif city



Plate 1.2
Contorted amphibolite schist. Jabajib, north-
west of At-Taif city
Page 1

The effect of this was to produce the following general topography. The south-western side of the Amirate is a fine example of a tilted and dissected tableland. It is at a height of more than 1,800m, with summits rising up to 2,592m above sea level. It drops abruptly (because of the fault systems of the Red Sea) towards the west, the coastal plain of Tihamah. In contrast, there is a distinct short drop towards the east. After that, the local topography changes to one of gentle relief, and this continues as one proceeds further towards the east and north-east where it eventually becomes a plain. Thus, elevation decreases in a general north-easterly direction, and it is here that the dip slope begins its gentle slope to the interior of Saudi Arabia. As a result of contrasting topography, settlement and communications, for example, also differ within the study area.

Geological Knowledge of the Study Area

The first geological investigation of the study area was conducted by the Syrian Agricultural and Geological Mission which reported in 1919. The Mission carried out its research at the request of Sharif Hosain of Makkah with the aim of exploring the development potential of the land which was then controlled by the short-lived Hashemite Kingdom of Al-Hijaz. With the fall of that regime and the succession of King Abdel-Aziz, no further research was carried out for 12 years due to the critical political situation and to the fact that non-Moslems were not then allowed to enter At-Taif city.

On April 15th, 1931, however, the well-known engineer, K S Twitchell, arrived in Jeddah to carry out an investigation of the

water resources of Al-Hijaz and Najd. Although unable to discover any new sources of underground water, Twitchell pointed to the possibility of worthwhile mineral deposits existing in the country. This attention to mineral wealth, and the simultaneous discovery of gold in the Amirate of At-Taif by a Turkish investigator, encouraged the Government (whose finances were desperate) to undertake mineral explorations. The aridity of the country, which exposes the rock strata to the geologists, greatly reduced the cost of this investigation and rendered the accumulation of results much faster than if the area had had an extensive vegetation cover. Hence a remarkable number of preliminary reports emerged from this wave of investigation. But the later discovery and massive exploitation of oil in the eastern part of the country brought these mineral investigations to a halt.

Since the 1960's, the Directorate General of Mineral Resources and several consultant firms have been carrying out new, more accurate and more intensive investigations for mineral deposits in the Arabian shield. Their undertakings have stemmed from the wish to see the country less dependent on the single source of income from oil. Thus the Government is presently encouraging capital investment, and a royal decree on mining regulations was passed on July 1st 1972 with a view to enticing private investment. Investors are reluctant, however, for bitter memories still linger of the inauspicious past of the Saudi Arabian Mining Syndicate and the many unlucky private enterprises involved in earlier mining operations.

Mineral Resources (Metallic and Non-Metallic)

There is no actual mineral exploitation within the study area at the present time, though a few ancient mines have been discovered. Evidence indicates that they were probably abandoned around 900AD. Modern investigations show that these ancient mines were probably abandoned because of unprofitability, which is also why re-opening of these pits has not been undertaken. While mineralisation often occurs at the contact zones between the amphibolite schist and granite gneiss, investigations reveal that the deposits are presently uneconomical for reasons of:-

- (a) limited deposit reserves,
- (b) low ore compound ratio,
- (c) current market price, and,
- (d) production costs; including transport, marketing and ore treatment.

1. Metallic Resources (prospected only)

Tungsten is found where the granite is in contact with amphibolite and amphibolite schist. The most important sites at present are Jabal Barad, Ar-Roddaf and Liyyah, which lie respectively to the south-west, south and south-east of At-Taif city. Copper, lead, zinc, gold, iron and possibly silver are also present in the study area. Typically small amounts of these metals are found beside veins of quartz. But no important quantities of high-grade ore have yet been found. The mining of these metals in At-Taif Amirate, however, is dependent upon the discoveries of mineable tungsten, the value of which compensates for the low-ore content of the other metals.

2. Non-Metallic Resources

Mica of the sheet type (extensively employed in insulator elements for electrical equipment) of suitable quality is found south-east of At-Taif city. Granite-pegmatite (sometimes containing various minerals such as uranium) is common around At-Taif city and further towards the south and south-east of the study area. But it is not considered to be of much economic value, for it disintegrates readily. Massive talc-chlorite rock or soapstone (used in paint, cosmetics, ceramic and paper industries) was quarried in the past to make vessels and pots. One of the largest of these quarries, named Al-Madan, lies south-east of At-Taif Amirate. Stone suitable for building and construction is also present in great abundance in the Amirate. The granitic and metamorphic rocks of the Precambrian period supply dimension stone (which can be cut and milled to specified sizes, shapes and surface finishes), crushed stone (used principally as concrete aggregate), and slate (used for milled products such as blackboards, electrical panels and floor tiles). But, is there any real economic use whatsoever for these resources? It would seem that there is little apart from the obvious uses of stone and crushed stone for building and construction purposes.

RELIEF AND GEOMORPHOLOGY

As an administrative unit, At-Taif Amirate bears only a partial relation to the topography of the western highlands of Saudi Arabia. In the west and south, the Amirate boundary follows the

major watershed of the highlands, which separates the headstreams of those wadis flowing to the Red Sea basin and of those flowing to the interior, but in the north and east the boundary does not follow any definite topographical feature. Hence the Amirate does not form a major natural geomorphological region, but comprises several small-scale ones:-

- (a) an uplands zone, above 1,800 m in height,
- (b) a foothills zone, between 1,500 and 1,800 m in height,
- (c) the plain, between 1,050 and 1,500 m in height.

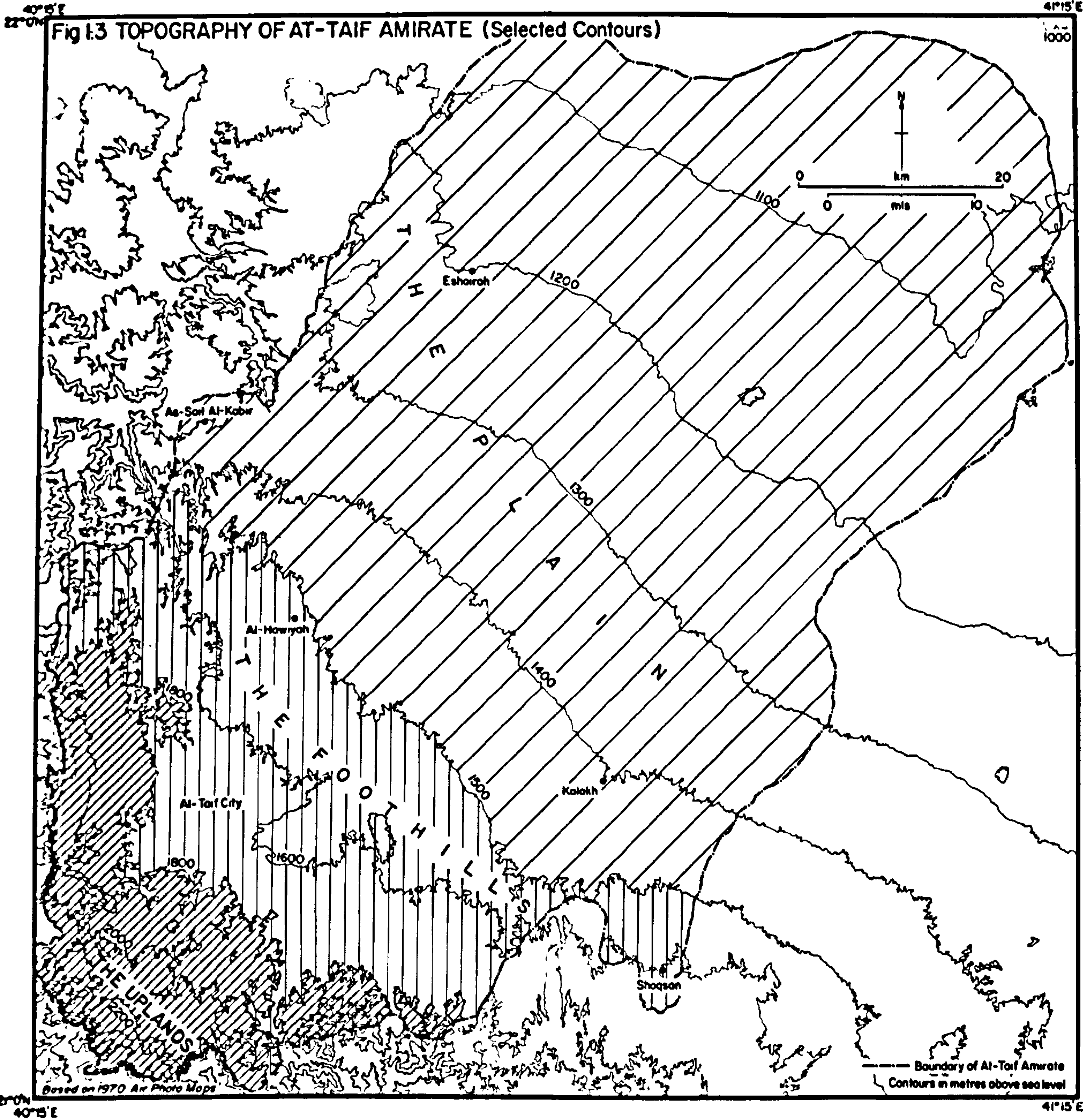
This subdivision reflects the general geomorphological character of the region. Tilting of the Arabian shield has resulted in a gentle north-eastern regional slope, although downfaulting of the Red Sea basin has produced much steeper slopes to the west of the watershed, outside the study area.

A general problem to bear in mind when discussing the geomorphology is that very little systematic research has been carried out. Hence it is difficult to go beyond general topographical description to produce a scheme of geomorphological history which would explain the development of the landscape over time.

Figure 1.3 is a topographical map of the study area, showing the areas covered by the three zones and selected metric contours taken from air-photo maps of 1970.

(a) The Uplands Zone

As may be seen in Figure 1.3, the uplands zone, above 1,800 m in height, is situated in the south-west of the Amirate. It was formed by the dissection of the western edge of the great uplifted block of the



Arabian shield. Long-continued erosion on both sides of the narrow southern part of the uplands has resulted in valley gaps, and hence made the 1,800m contour line discontinuous. The highest point in this zone (and also the highest in the Amirate) is Jabal Daka (2,592 m), although level lands may be found up to 2,200m. Above that height, there are separated mountains with gentle slopes and smooth summits, further indications of the long-continued weathering and erosion moulding the land surface. Hence the terrain is not very rugged despite the altitude. In overall character, the uplands are relatively flat with higher points here and there, particularly on the western and southern edges (Plate 1.3). These may have the shape and size of mountains, being over 300m above the level ground, or may be isolated rock-masses up to 100m above the level ground. The uplands descend very steeply to the west and south-west towards the downfaulted Red Sea basin, outside the study area. Towards the east and north-east, there is a complete contrast, because the regional slope is much gentler.

This contrast in geomorphology has affected the shape of wadis (which will be discussed in the section on water resources, later in this Chapter). Briefly, however, the uplands contain the sources and tributaries of all the major wadis of the study area, as well as those of other wadis which flow to the north and north-west beyond the study area. The wadis heading towards the Red Sea basin are very steep-sided and narrow-bottomed. The steep slopes and consequent high erosion rates have resulted in the small amount (or even absence) of loose material in their channel courses. On the other hand, the wadis heading towards the east and north-east are much less steep in their



Plate 1.3

View looking south-west from Ash-Shafa. This exemplifies the relief of the uplands, showing summits rising above relatively level surface

courses and sides, and are flat-bottomed, except where they enter the foothills zone; here they have steep sides and moreover have narrow bottoms.

The uplands of At-Taif Amirate with their high altitude, not only above sea-level but also above adjacent areas, have always been a barrier to communication with the south-west and west (especially with Tihamah, the Red Sea plain) - indeed travel between the uplands and the rest of the Amirate is also difficult. As a result, movement in the uplands was formerly directed mainly towards the north-east (where the city of At-Taif is located) and the north-west, where rough tracks lead to the Red Sea plain. Improved technology and greater wealth have now largely overcome the problem of accessibility : for example, they have made it possible for an asphalted road to cross the Jabal Kara which ascends 1,200m from base to summit. The construction of this very costly length of road (22.5 km, opened 2nd June 1965) has completed the Trans-Arabia Highway and hence connects the Arabian Gulf with the Red Sea.

The height of the uplands gives them a distinctly cooler and wetter climate than that of the surrounding areas, and hence has allowed agriculture, with dry-farming a viable means of existence. One result is that agricultural holdings are not here restricted to wadi courses, as in other zones of the Amirate. Another feature is that the vegetation, scenery and cool air have attracted visitors and turned the uplands into what can be regarded as a summer resort. The overall effect has been that the uplands are more densely inhabited than other sections, particularly compared with the plain. High altitudes have also, because of

extreme winters, made life difficult for the few transhumant pastoralists who move between these uplands and the Red Sea plain.

(b) The Foothills Zone

This zone lies between 1,500 and 1,800m in altitude. It separates the uplands zone to the west from the plain to the east (Fig 1.3). Unlike the uplands, the foothills consist of one continuous area of land. Its terrain includes two principal geomorphological features. The first is the upper parts, which include the steep boundary edge of the uplands, where there is an abrupt drop of the land. The second feature of the foothills is that ruggedness declines in a north-easterly direction, i.e., towards the plain, and at the same time summits become lower and more isolated. As a result, open, flat areas such as that occupied by At-Taif city occur.

The wadis are very steep in their upper courses, where they leave the uplands for the foothills, both in long-profile and in cross-profile. Although weathering and erosion are severe here, the rock wall is too steep for material to rest upon a free face. Thus it is continually supplying the lower parts with eroded material, usually during flood times. A notable result could be that in many cases the original slope must have disappeared. However, no systematic investigation of slope development has yet been undertaken to check such hypotheses. It appears that the transfer process has no fixed pattern, because floods are highly irregular in occurrence and strength; although, clearly, the more powerful the flood, the greater the amount and the distance of movement downstream (Plate 1.4).

The foothills, except the part immediately bordering the uplands,



Plate 1.4

(a) Rocks in wadi course, Wadi Wiji, downstream of At-Taif city
 (b) Wadi course, Wadi As-Sirr, south-east of At-Taif city. Note
 smaller size of loose material on bed

are distinctly attractive for settlement. The land, especially that alongside wadi courses, is suitable for grazing if not cultivation; there are no major physical obstacles to communication, and the area is well connected with the rest of the country. Here lies the city of At-Taif, the focus of the Amirate, situated in an open space at about 1,660 m altitude. The Wadi Wiji divides the city into two. Being near a wadi is vital for survival, not only for agricultural holdings, but also for settlements of any kind, since wadi beds are the most likely locations for groundwater. This resource has been used for many centuries in this section, even before the rise of Islam, mainly through dams of advanced design, and underground galleries known here as ains (in Iran as qanats).

(c) The Plain

The plain which occupies just under three-quarters of the study area, lies at an elevation of between 1,050 m and 1,500 m. Its upper part which borders the foothills is covered by sediments coarser than those on its lower part - here these are chiefly sands and gravels, usually in basins (Plate 1.5). Furthermore, while the upper part is slightly undulating, the lower part is almost flat (Plate 1.6). Both parts contain small inselbergs, prominent residual rock masses, largely Precambrian in age, isolated by circumdenudation, which has produced a low-level cover of Quaternary sediments.

The wadis die out about half way towards the boundary of the study area, none of them actually reach the north-eastern edge. As will be seen later (in the section on water resources) floods are not frequent enough to maintain wadi courses, and so wind action has



Plate 1.5

Sands and gravels in wadi course, Wadi As-Sirr, east-south-west of At-Taif city. Note conglomerate on the low bank

Page 11



Plate 1.6

The plain at Rokbah. This shows the flatness of this section

Page 11

filled up the wadis, partially or completely. These courses have flat bottoms and low sides, only centimetres in height. In the event of a strong flood, the wadi sides may be completely washed away and new ones formed. However, strong floods are infrequent for two main reasons : the infrequency of torrential rainfall, and the highly absorbent nature of the surface materials.

The physical characteristics of the plain have closely affected human activities. Unlike the uplands and foothills, the plain offers no opportunities for cultivation, at least under present conditions. Attention has thus been diverted towards grazing possibilities, and here is the natural home of the semi-nomadic population of At-Taif Amirate. Apart from its upper and western parts, the plain offers no favourable conditions for permanent settlement, and thus has the lowest population density of the study area. The harsh environment has even influenced the character of its inhabitants : they are a tough and hard people. Apart from the Trans-Arabia Highway which traverses the plain, there are still no asphalted roads connecting it with the rest of the Amirate, except in the extreme south where a road crosses the fringe of the plain. Thus it is possible to say that, although there are no actual physical obstacles hindering the development of transport, the plain is in many respects isolated and undeveloped because of its low economic potential.

CLIMATOLOGY

The climate of At-Taif Amirate has two distinguishable major

features. The first is the marked difference in temperature between the uplands and the plain. As has been mentioned earlier, the uplands are several hundred metres higher than the plain, which is itself more than 1,050m above sea level. Consequently, the uplands of At-Taif Amirate are distinctly colder than the average for the latitude. The second feature is a marked difference in the rainfall, with the uplands receiving the highest amount of rainfall in the Amirate. This amount decreases markedly towards the plain. Given such variation, the climatic conditions of the Amirate appear as more 'comfortable' than those of the neighbouring cities of Makkah and Jeddah and their neighbourhood; and, in fact, the Amirate has a reputation for having a remarkably congenial climate, and was noted as a pleasant summer resort even before the rise of Islam. One legend, referring to the Amirate's relatively good climate, speaks of God transferring the territory of At-Taif from Syria (and other legends tell the same story but mentioning the Yemen) in answer to Abraham's prayer asking help for the dwellers of the "wadi without cultivation"; specifically, to supply Makkah with "fruits"⁵ from a region that could be agriculturally productive. Even now, Makkah is still At-Taif's largest market and remains well supplied with the same "fruits" from the holdings of At-Taif.

Despite its ancient and widespread reputation, the climate of the study area has never been the subject of serious investigation. During the early years of the present Saudi rule, meteorological stations were prohibited (as in the rest of the country) for attempts to predict weather were considered as an affront to God, to whom alone

the future was entrusted. It was not until 1960 that the Ministry of Defence and Aviation established a meteorological station at Al-Hawiyah airport (23 km north-east of At-Taif city), and since then sporadic data have become available. Up until the time of writing (January 1975), the readings from this station have been wrongly applied, both in daily weather forecasts, and in the series of Government Statistical Year Books (1965-1973) as being representative of the city of At-Taif. As a result, foreign consultant firms as well as others have used these figures to apply to the city of At-Taif, despite the fact that the city and the Al-Hawiyah airport have quite different local climates, as will be shown later. The latest example of such misuse may be seen in the reports of Robert Matthew, Johnson-Marshall and Partners on the At-Taif city master plan, 1971-1991 : for example, in their Interim Report, in the section on At-Taif, page 19, 1971 (English edition) and Alternative Urban Strategy, in the section on At-Taif, page 16, 1972 (Arabic edition).

There are two main sources of information on the climate of the Amirate : the General Directorate of Meteorology (belonging to the Ministry of Defence and Aviation) which runs the station at Al-Hawiyah airport, and the Ministry of Agriculture and Water, which has stations distributed over the study area. For administrative reasons, their observations have been published by the Ministry of Agriculture and Water itself, and not by the General Directorate of Meteorology; a problem which will be overcome if and when the 200 or so Ministry of Agriculture and Water stations in the country are handed over to the General Directorate of Meteorology, as has been proposed by the

Central Planning Organisation.⁶ In addition to these two sources, other ad hoc sources of information have been used here.

Since At-Taif city is the Government's summer seat, the Central Planning Organisation plans to install an improved weather station in the city itself. For several years, however, the Ministry of Agriculture and Water station there was not completely operative because of a shortage of trained staff, and it was not until March 1966 that the firm Italconsult brought the station back into full operation. This Italian firm established many recording rain-gauges, totalising rain-gauges, and wadi-gauging stations. However, although the period for which data exist is very short, available information is reasonably good both in quality and quantity; further improvements have been proposed by the Central Planning Organisation.

Table 1.2 shows in detail information of the stations presently in operation in the study area.* The main reason for the large number of stations (16) in the study area is the high amount of rainfall. Perhaps it would be more beneficial to have fewer stations, but better equipped, and whose distribution was fairly even over the area.

Temperature

As altitude in the study area lies between 1,050m and 2,500m above sea level, ranges in temperature bigger than usual for such a small area (7,290 sqkm) in Saudi Arabia, may be expected. A cooler

* An observatory is under construction at present on the summit of Jabal Daka, to the south-west of At-Taif city, at 2,592m above sea level; it is to be called the Islamic Observatory and belongs to the Moslim World League

TABLE 1.2

Basic Information on Meteorological Stations, At-Taif Amirate, 1973

No	Station	Latitude N	Longitude E	Altitude m a s l	Year Installed	Run By	Type
1	Al-Akhdher	21° 30'	40° 36'	1,400	1964	Min of Agric and Water	RG
2	Al-Ghadirain	21° 20'	40° 19'	1,867	1964	Min of Agric and Water	RG
3	Al-Hawiyah Airport	21° 29'	40° 32'	1,471	1960	General Meteorological Dept	RG, Tem, RH, Wi, Pr, SC, STS, Fog
4	Al-Hawiyah	21° 26'	40° 31'	1,490	1964	Min of Agric and Water	RG
5	Akramah Dam	21° 14'	40° 21'	1,764	1956	Min of Agric and Water	RG
6	Ash-Shafa	21° 04'	40° 22'	2,062	1964	Min of Agric and Water	RG
7	As-Sail Al-Kabir	21° 37'	40° 25'	1,189	1964	Min of Agric and Water	RG, RO
8	At-Taif Agric Unit	21° 16'	40° 24'	1,665	1961	Min of Agric and Water	RG
9	At-Taif General Sta	21° 14'	40° 21'	1,634	1964	Min of Agric and Water	RG, Tem, RH, Wi, ST, SR, Evap
10	Biqran	21° 07'	40° 39'	1,665	1964	Min of Agric and Water	RG
11	Bissel	21° 12'	40° 44'	1,480	1964	Min of Agric and Water	RG, RO
12	Hema Saisad	21° 18'	40° 30'	1,580	1969	Min of Agric and Water	RG, Tem, RH, Wi, ST, SR
13	Kalakh	21° 19'	40° 48'	1,390	1964	Min of Agric and Water	RG
14	Wadi Liyyah	21° 13'	40° 26'	1,670	1964	Min of Agric and Water	RG, RO
15	Wadi Thamalah	21° 08'	40° 31'	1,697	1964	Min of Agric and Water	RG
16	Wadi Wijj	21° 12'	40° 20'	1,783	1967	Min of Agric and Water	RG

RG Raingauge

Tem
EvapTemperature
EvaporationWi
PrWind
PressureSTS
STSand and Thunder Storms
Soil TemperatureSC
SRSky Condition
Solar Radiation

RH Relative Humidity

Source : General Meteorological Department; Ministry of Agriculture and Water

climate prevails in the western and southern parts compared with the northern and eastern parts. The influence of altitude on temperature change in such areas could, in principle, be illustrated by comparing mean maximum and minimum temperatures recorded at stations in reasonably close proximity, but at different elevations. However, the number and distribution of stations in the Amirate are far from sufficient for the analysis of regional climatic variation : there are no records for higher locations which clearly have lower averages, nor for lower places which have different conditions resembling these in the continental interior (high day and summer temperatures and low night and winter temperatures).

In addition to altitude, it appears that degree of cloud cover is a major factor controlling temperature. The west and south of the Amirate have a denser cloud cover than the north and east. This statement is based on personal observation, as there are no quantitative data apart from those supplied by the station at Al-Hawiyah airport. This station, which is situated at a height of 1,471 m, accurately could be regarded as representing neither the lower nor the higher parts of the Amirate. Hence its cloud cover readings are expected to be lower than the cloud cover at higher altitudes and higher than that at lower altitudes. The 1966-1972 average sky condition in Al-Hawiyah airport (Table 1.3) showed that the number of cloudy days (more than four-eighths of sky) and partly cloudy days (four-eighths of sky cover or less) are much greater than wholly clear days (no clouds reported during 24 hours). In figures, there were 52.8 days with cloudy skies, 287.5 days with partly cloudy skies, and only 24.9 days with clear skies. These

TABLE 1.3

Sky Conditions at Al-Hawiyah Airport, 1966-72 Average

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
No of clear days	1.4	3.3	3.4	2.7	2.4	2.0	0.7	0.4	0.7	4.3	1.0	2.6	24.9
No of partly cloudy days	23.3	22.9	24.1	22.4	22.0	23.6	25.1	27.3	25.7	24.7	22.4	24.0	287.5
No of cloudy days	6.3	2.4	3.4	4.9	6.6	4.4	5.1	3.1	3.6	2.0	6.6	4.4	52.8

Source : General Directorate of Meteorology

clouds, although not heavy, reduce the amount of solar radiation received at the land surface, and so air temperature.

Three stations within the study area supply data on temperature : Al-Hawiyah airport, At-Taif city general station, and Hema Saisad. Data provided by Hema Saisad station are available for a shorter period (1970-1973) as compared with the Al-Hawiyah airport and At-Taif city general station (1966-1973). Besides, this station (Hema Saisad) is very close to At-Taif city general station (about 14 km), and to Al-Hawiyah airport (about 13 km). Furthermore, it is only 109 m higher than Al-Hawiyah airport, and 54 m lower than At-Taif city general station. This shows clearly the uneven distribution of meteorological stations. Records for the cities of Jeddah and Ar-Riyadh for the period (1966-1973) are included for comparison (Fig 1.4). Jeddah, which is on the Red Sea, represents the coastal Tihamah, and Ar-Riyadh the interior table land of Najd.

From Figure 1.4 (a, b and c) it appears that there is a long summer of about four months (June to September) without a marked peak. It is natural in such latitudes to have a long, pronounced summer because of the double passage of the sun, overhead at June and August. Hence the first marked rise in maximum temperature always appears in June, and high temperatures often last until the end of September. Jeddah (Fig 1.4 d), which is on the Red Sea ($21^{\circ} 30' N$), tends to have a maximum in July because of the slower absorption of heat by the sea, and in this respect Jeddah is similar to Ar-Riyadh (Fig 1.4 e), which is located inland on a high latitude ($24^{\circ} 42' N$).

The absence of a marked peak in summer temperatures at

TEMPERATURE (monthly mean maximum and mean minimum in °C)

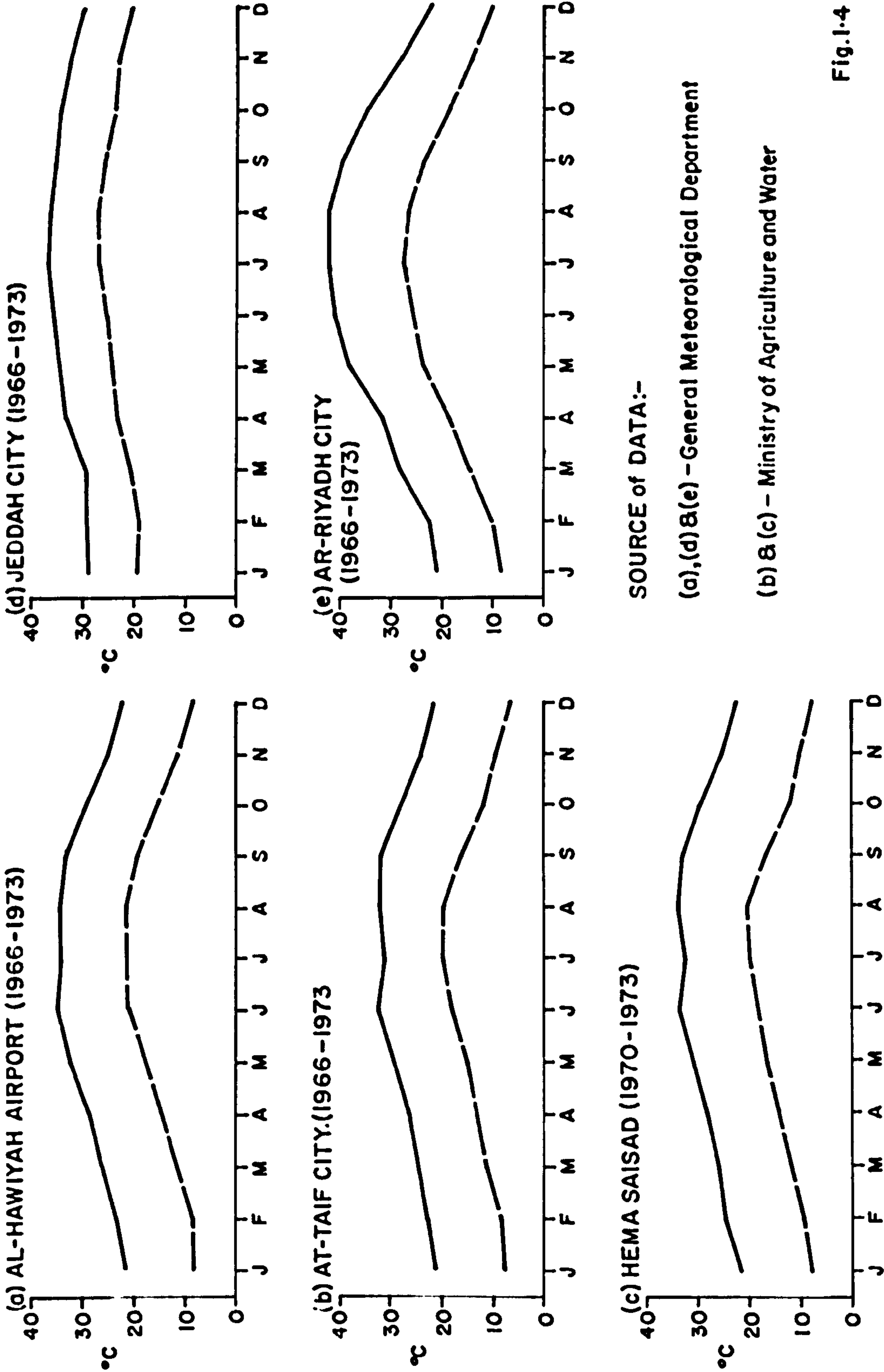


Fig.1-4

Al-Hawiyah airport, At-Taif city general station, and Hema Saisad may be related to the approximate stability in cloud cover throughout the year. The cloud cover tends to produce similar high temperatures throughout the season by reducing mean solar radiation at ground level, as shown in Table 1.4. This phenomenon is clearer in the cases of the study area stations than those of Jeddah and Ar-Riyadh.

Although At-Taif city general station is only 54 m higher than Hema Saisad, which is in turn 109 m higher than Al-Hawiyah airport, a noticeable difference of summer temperatures can be identified. The mean maximum at Al-Hawiyah is always about 1°C higher than At-Taif city, mainly because of lower altitude and cloud cover. The difference is less striking in the case of mean minimum. Al-Hawiyah airport has four months (June to September) with almost the same mean maximum, between 33.6°C and 34.9°C . The mean minimum also tends to near similarity, between 19.7°C and 21.7°C . At-Taif city general station, on the other hand, has during the same period a mean maximum which varies between 31.6°C and 32.5°C . The mean minimum is between 16.9°C and 20°C . This example shows the differences between two stations situated 23 km apart and separated by 163 m in height. Obviously, the difference between the high and low parts of the Amirate must be more striking : but, unfortunately, no data are available.

Winter, the second significant season, starts by December, when at At-Taif city general station the mean maximum is 22.3°C (22.3°C at Al-Hawiyah airport), and the mean minimum is 7.3°C (8.6°C at Al-Hawiyah airport). January has the lowest records, as

TABLE 1.4

Mean Solar Radiation (gm cal/cm²/day)*,

At-Taif City General Station, 1970-73

January	February	March	April	May	June	July	August	September	October	November	December	ANNUAL MEAN
379	463	530	551	554	590	562	545	484	461	377	359	488

* gramme calories per sq cm

Source : Ministry of Agriculture and Water

the mean maximum is 20.6°C (21.7°C at Al-Hawiyah airport) and the mean minimum is 7.5°C (8.1°C at Al-Hawiyah airport). Towards the end of February, temperature starts to rise quite rapidly. From Figure 1.4 (a, b, c, d and e), it is clear that the rises reported at Al-Hawiyah airport, At-Taif city general station and at Hema Saisad are less remarkable than that at Ar-Riyadh, and more remarkable than that at Jeddah. (Ar-Riyadh, however, located inland on an elevated table land, resembles the continental type, while Jeddah has a very slow rise because the sea modifies temperature change.)

Winters may be severe, particularly at high altitudes, where freezing of ponds and frost are common and hence plants and crops often suffer from damage. Lack of adequate shelter, both for people and livestock, causes a regular occurrence : exposure. Consequently, certain tribes practise transhumance during this season between the uplands of At-Taif Amirate and the Red Sea plain of Tihamah (outside the Amirate). Even some of the inhabitants of At-Taif city leave for Makkah and Jeddah during particularly severe conditions. Snow, although uncommon, did fall heavily on the city on the Wednesday night of 5th March 1969 - so much so that bulldozers had to be used to clear the streets.⁷

Although summer and winter as seasons are more marked and last longer, spring and autumn are still identifiable. Spring, particularly when accompanied by abundant rain, is a very pleasant season indeed. It is best described by early Arabs as the season when "time has moderated, greenery is seen everywhere, gifts are presented, and the poor stopped wandering"⁸ : signs of a healthy and wealthy

season, particularly for herdsmen. Autumn, on the other hand, is less distinguishable in comparison with spring, being only a short, transitional season. Its mild temperature, however, is important for vines and pomegranates.

Humidity

As may be seen from Table 1.5, relative humidity is generally low, because of the absence of large evaporating surfaces and the general dryness of climate. There is, however, a marked increase during winter, reflecting different atmospheric conditions. Such seasonal variation is matched by daily variability, and very occasionally on the same day the maximum may be 100% and the minimum approaching 0%. Four selected examples of daily variability may be quoted from the records of Al-Hawiyah airport station (1969-1973). On 29th December, 1971, the maximum was 100%, and the minimum 0.9%. On 7th January 1972, the maximum was 100%, and the minimum 72%. On 23rd May 1970, the maximum was 25%, and the minimum reported as 0%. Lastly, on 30th June 1970, the maximum was 35%, and the minimum 0%. * Despite such variability, moderate relative humidity and temperature mean that the climate is pleasant and invigorating : a combination of high humidity and high temperature would lead to debilitation and difficult conditions. Nevertheless, chapping of skin caused by low humidity and low temperature is so common that vaseline has come to be a standard requirement.

* As taken from official records

TABLE 1.5
Relative Humidity %, 1966-73

(a) Al-Hawiyah Airport

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Mean Maximum	84.8	77.5	68.0	65.9	55.6	37.5	37.4	38.4	45.5	63.3	82.8	84.3
Mean Minimum	34.6	26.3	22.0	20.5	16.9	10.4	13.4	12.6	11.8	14.9	29.6	32.5

(b) At-Taif City General Station

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Mean Maximum	67.0	69.2	63.9	64.0	57.7	38.0	34.2	33.4	41.0	58.7	75.7	74.5
Mean Minimum	26.6	25.7	25.1	25.1	20.2	15.0	17.2	14.5	12.1	14.2	26.7	26.6

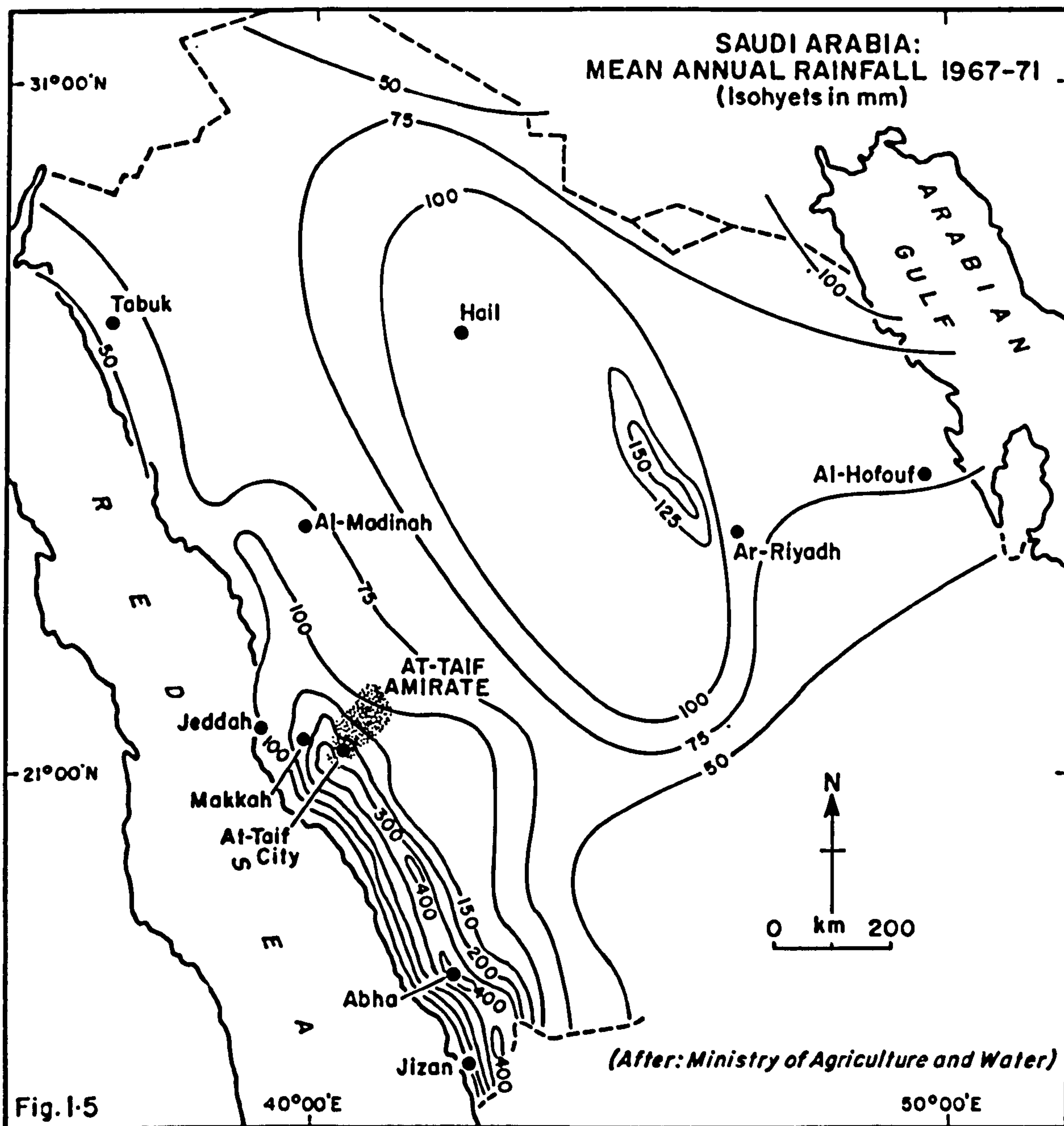
Source : (a) General Directorate of Meteorology
 (b) Ministry of Agriculture and Water

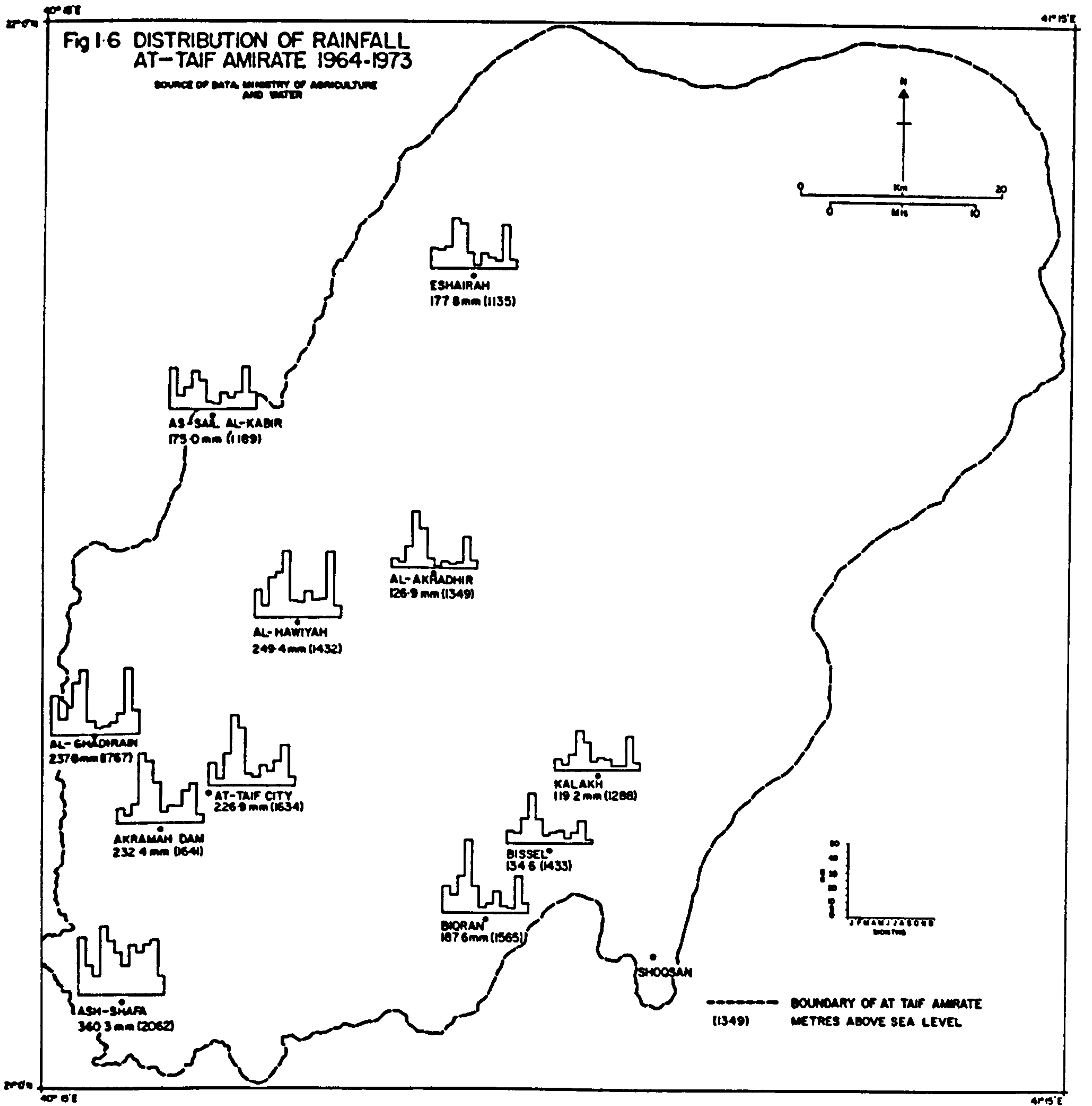
Rainfall

From Figure 1.5, it appears that the study area is at the northern edge of south-west Saudi Arabia, which receives a considerable amount of rainfall compared with the rest of the country. At-Taif Amirate has a wetter climate than the neighbouring areas (particularly Makkah and Jeddah), which is related directly to the topography and geographical position of the Amirate.

1. The Amirate is on the northern verge of the As-Sarah mountain range, which extends south towards and into the Yemen.
2. South of the Amirate, this range changes to a west-east orientation instead of a general north-west to south-east trend.

It is possible to divide the rainy season into two main periods. The first is spring, with a rainfall peak in most cases in April. Climatic investigations carried out in the field by Italconsult⁹ showed that a low pressure trough forms along an east-northeast line from Khartoum to Jeddah and draws in moderately moist air from the south-east and south-west. Part of this south-easterly monsoon current is channelled along the Red Sea trench, and is diverted daily towards the land mass because of differential heating. This diverted warm, moist air rises along the As-Sarah mountain range. As a result, thunderstorms occur along the mountain ridge. Accordingly, the foothills and the plain of the study area receive much less rainfall, as they are located in a rain shadow area. Figure 1.6 clearly illustrates this phenomenon. It is also believed that position influences spring rainfall. As As-Sarah





mountain range changes general direction from northwest-southeast to east-west, the warm moist air, which tends to flow either closely parallel or at a highly oblique angle, flows directly towards the east-west oriented section. Thus there is a tendency for more frequent thunderstorms here. Further field investigations, again carried out by Italconsult,¹⁰ showed that there are two other sites with these characteristics, but they are outside the study area, towards the south. This east-west orientation is regarded as a major factor, attracting the less frequent summer rainfall (Fig 1.6).

The second main period of rainfall is in late autumn and mid-winter (November and January respectively). It is caused by an out-break of modified Mediterranean air from the north, and is reinforced by the Red Sea which allows partial regeneration of moisture to develop. This moisture-charged air is diverted towards the land mass, where it is further influenced by the strong orographic factor. Eleven selected stations are used to show distribution of rainfall in At-Taif Amirate (Fig 1.6). This shows clearly the seasonality and marked orographic influence already mentioned.

To summarise : the mountains of the study area cause the moisture — laden warm air blowing from the Red Sea to ascend and cool, giving orographic rain on higher places. Rainfall tends to decline in amount and regularity towards the east and north of the study area. The overall picture is re-emphasised in the following section.

Variability in rainfall both from month to month, and from year to year, is common. It increases towards the north and east of the study area. A very long period of recording might give an accur-

ate measure of reliability from which a fair average could be determined, but since there are no long records of rainfall in the study area, averages must be treated cautiously. For example, in January 1969, Biqran (in the south-east of the study area) had a rainfall total of 132.5 mm, which raised the month's average for 1965-1973 to 18.3 mm. However, the actual amounts of rainfall for January recorded in Biqran during these years were zero x 4, 132.5, 32.1, zero, 1.0, zero mm. In June 1965, there was 204.0 mm of rain at Akramah dam station (south-west of At-Taif city), while the total in the previous year (1964) was only 175.3 mm. Ash-Shafa station recorded in 1968 rainfall totalling 651.5 mm, the highest annual total actually recorded in the study area during the period 1964-1973.

Furthermore, a single day or a very few hours may witness a heavy downpour constituting a high proportion of the whole year's rain, as was, for example, 18th April 1968. The stations of Al-Akhadher, Wadi Liyyah, Biqran, Wadi Wijj, Ash-Shafa and Akramah dam had between 100 and 117 mm of rainfall. On the following day, At-Taif city general station experienced 120.3 mm of rainfall. Several similar examples could be quoted, which imply again that averages should not be taken as entirely representative figures.

Such variability of rainfall has many disadvantages. For instance, the harsh year experienced in Wadi Liyyah in 1966 brought considerable losses. Farmers had to sell their livestock, some of the wadi inhabitants migrated, and water trucks were sent daily to supply water to the thirsty people and their dying fruit trees and vines.

Accordingly, the alistiska or prayer for rain is a common practice.



Plate 1.7
 Roof equipped with several gutters. Arafat Hotel,
 At-Taif city
 Page 28



Plate 1.8
 Wide flood gates. As-Solaiman's orchard, Jabrah
 Wadi Wiji
 Page 28

TABLE 1.6

Maximum Wind Speeds (km/hour) at Al-Hawiyah Airport (1968-73)

and At-Taif City General Station (1973)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Al-Hawiyah Airport	50.7	45.0	58.5	59.3	52.3	46.6	54.7	60.8	47.9	47.9	45.0	41.2
At-Taif City General Station	18.5	19.0	21.5	20.0	23.0	21.5	25.5	25.2	22.0	21.0	14.5	16.5

Source : General Meteorological Department; Ministry of Agriculture and Water

TABLE 1.7

Mean Wind Speeds (km/hour) at Al-Hawiyah Airport and At-Taif City General Station, 1968-73

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Al-Hawiyah Airport	13.3	12.4	15.8	15.8	14.6	16.5	20.0	19.6	15.6	12.9	12.0	10.6
At-Taif City General Station	6.6	6.0	6.6	6.5	5.4	6.9	9.0	8.6	5.7	4.9	4.5	4.9

Source : General Meteorological Department; Ministry of Agriculture and Water

TABLE 1.8

Prevailing Wind Directions at Al-Hawiyah Airport : Numbers of Days with given Conditions, 1969-73

N	NE	E	SE	S	SW	W	NW	Variable	Calm	TOTAL
2.6	13.8	5.2	41.2	17.4	78.6	82.0	109.2	14.8	0.4	365.2*

* 29 days in February 1972

Source : General Meteorological Department

wind directions at Al-Hawiyah airport (not counted at At-Taif city general station). It is interesting to note that there are on average (1969-1973 data) 269.8 days a year (73.9%) on which the wind at Al-Hawiyah airport comes from the north-west, west or south-west. Wind blowing from these directions brings most of the annual rainfall. There was at Al-Hawiyah airport, during 1972-1973, rainfall totalling 338.3 mm : 262.6 mm (77.6%) were recorded when the prevailing wind was north-westerly, westerly and south-westerly; 50 mm (14.8%) when the wind came from other directions; and 25.7 mm (7.6%) during times of variable wind.

WATER RESOURCES

The water resources problems of At-Taif Amirate are quite distinctive as compared with other parts of the country. There is, at least in the uplands, relatively abundant rainfall and, accordingly, fairly frequent floods; but because of the nature of the underlying rocks, the small volume of superficial alluvial deposits and the steep slopes in part of the Amirate, there are few good potential water-holding strata (aquifers).

Unfortunately, data on many aspects of the hydrology of the region are still lacking, and much of the available data only cover relatively short periods. Nevertheless, some understanding of the water resources of the study area may be obtained from the available data, material and other ad hoc information.

Some general characteristics of the regional hydrology will be

discussed here. One major climatic influence is the marked orographic accentuation of rainfall (see Fig 1.6). This effect produces, as mentioned before, a steep isohyetal gradient with the higher rainfall totals in the uplands. Since rainfall largely dictates the hydrological characteristics, there are therefore major differences within the study area in the intensity of hydrological processes. Rainfall in the uplands runs off quickly, and on leaving the generally impermeable bed rock surface of the mountain face, seeps into the encircling sands and gravels. The eastern and northern parts of the study area, for instance, have widely spaced drainage courses, some of them not even clearly defined, which reflects the low rainfall and small runoff. The higher places, consequently, have youthful wadis, some of which have been developed on resistant rocks.

Most of the groundwater in the study area occurs in the upper fissured layers of the crystalline rocks. This broken permeable ground which contains granites appears to be more weathered than the more compact schists and gneisses, and is sound and compact only at depth. Since erosion is still active in part of the study area, the granites are thus of great importance from the hydrological point of view : they form a valuable aquifer which is increasing in size. Groundwater is found also in the unconsolidated deposits covering the solid bed rock.

The thickness of alluvium and weathered rocks (the permeable material) varies considerably from one place to another. This is very important, because it provides drainage routes and storage for the groundwater : hence the thicker the porous layer, the more likely is

it that groundwater will be present. In November 1966, the foreign firm, Italconsult, made a series of measurements of the thickness of the permeable cover, using electrical prospecting methods based on the study of subsurface resistivity around the city of At-Taif and the seismic method elsewhere.¹¹ These measurements, however, were limited to selected parts of the wadis and do not provide a complete picture of the structure and groundwater possibilities in the study area. Nevertheless, they are of considerable interest. The total thickness of cover in Wadi Wijj upstream of the city varies between 10 and 40 metres. Downstream, the thickness is considerably less, reaching 15 m in only a few places. Wadi Al-Qaim, down and upstream of the settlement of Al-Hawiyah, has a thickness of 15-20 m. A little further upstream, the permeable stratum becomes 30 m thick. Wadi Liyyah, in its upper parts, has a thickness that varies from 0 to 15 m. Its middle parts show similar or smaller depths of material. Further downstream, the permeable layer has a thickness of 20 m. More investigations made in 1967 showed that the quantity of water stored within the alluvium of Wadi Wijj basin was around six million cubic metres; and some seven million cubic metres in the basin of Wadi Liyyah. Similar investigations carried out in the adjacent Tihamah (outside the study area) show larger and richer aquifers. For instance, it has been estimated that there are 150 million cubic metres stored within Wadi Naman basin and 315 million cubic metres in the basin of Wadi Fatimah.¹²

The chemical composition of the water is generally good and approaches the World Health Organisation standard as indicated

below (Table 1.9).

From the bacteriological angle, the water is sterile at its origin, which means that it is suitable for domestic, agricultural and industrial purposes. Water from places other than Al-Mathnah could have a different mineral content and chemical composition. However, the variability is believed to be small because of the local similarity of rock materials. Pollution may occur where water is flowing freely at shallow depths. Wells of Ajlan and Hawaya, for instance, now located within At-Taif city, are no longer noted for their purity. Saline water is present in the deepest fissures, but it has never been exploited.

Although the study area receives more precipitation than adjacent areas, it has less groundwater storage potential, an outcome of its structure and slope. The rate and extent of loss are quite rapid. The small amount of groundwater makes rainfall variability a more critical problem. Consequently, prolonged droughts increase concern about the adequacy of water supply. There are two ways of overcoming water shortage : increasing conservation of runoff and increasing precipitation. But in either case, groundwater reserves should be protected from depletion.

Within the At-Taif Amirate there are four major wadi systems. They are, from west to east:-

- (i) Al-Qaim - Wiji;
- (ii) Liyyah;
- (iii) Al-Madan, and,
- (iv) Bissel.

TABLE 1.9

Comparison of Chemical Characteristics of Water from Wadi Wijj with WHO Standard

	Ain Al-Mathnah (Wadi Wijj)	WHO Standard	
		desirable	admitted
Electrical conductivity (mhos at 25°C)	610.00	-	-
Sodium	46.00	50	200
Potassium	8.00	-	-
Magnesium	11.00	50	150
Calcium	64.00	75	200
Chloride	44.00	200	600
Sulphate	52.00	200	400
Bicarbonate	222.00	-	-
Boron	0.25	-	-
Total of dissolved solids	644.00	500	1,500

Source : Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 8,
page 11, Rome, 1967

Toward the north-west and north of the Amirate, there is a large number of very important tributaries of Al-Yamaniyah and Ash-Shamiyah wadis (both in turn tributaries of Wadi Fatimah), of Al-Aqiq and Ar-Rabwah/Sawamed wadis - but many of these are not completely confined to the study area. The drainage network is illustrated in Figure 1.7.

(i) Wadi Al-Qaim (like other wadis) originates in the uplands at an altitude of 1,800m. Its tributaries - especially Jebajib - are well developed because of high runoff, resulting from the low permeability of the local schists (Plate 1.9). Alluvial deposits are very rare and after Masarraah, further downstream, the wadi changes direction from east to north-northeast because of the presence of resistance, the very compact granite gneiss. The alluvium becomes thicker as slope angles decrease and more tributaries join the main course from the west. Further downstream, the wadi again changes direction and crosses a heavily weathered surface. The weathering extends to a depth of 10-15 m, as far as can be deduced from the few wells sunk in this zone.¹³ The alluvial deposits are discontinuous; those visible consist exclusively of sand derived from weathering of the granite, and are mixed with the altered granite itself. After crossing this zone, the wadi runs north-east through low hills until it joins Wadi Wijj, which is known at this section as the Wadi Adwan. Its full length (according to 1970 air-photo maps) is about 52km.

Wadi Wijj, which flows through the city, is the central hydrological feature of the Amirate. It rises in the north of Ash-Shafa district at an altitude of more than 2,200m. An asymmetrical drainage pattern

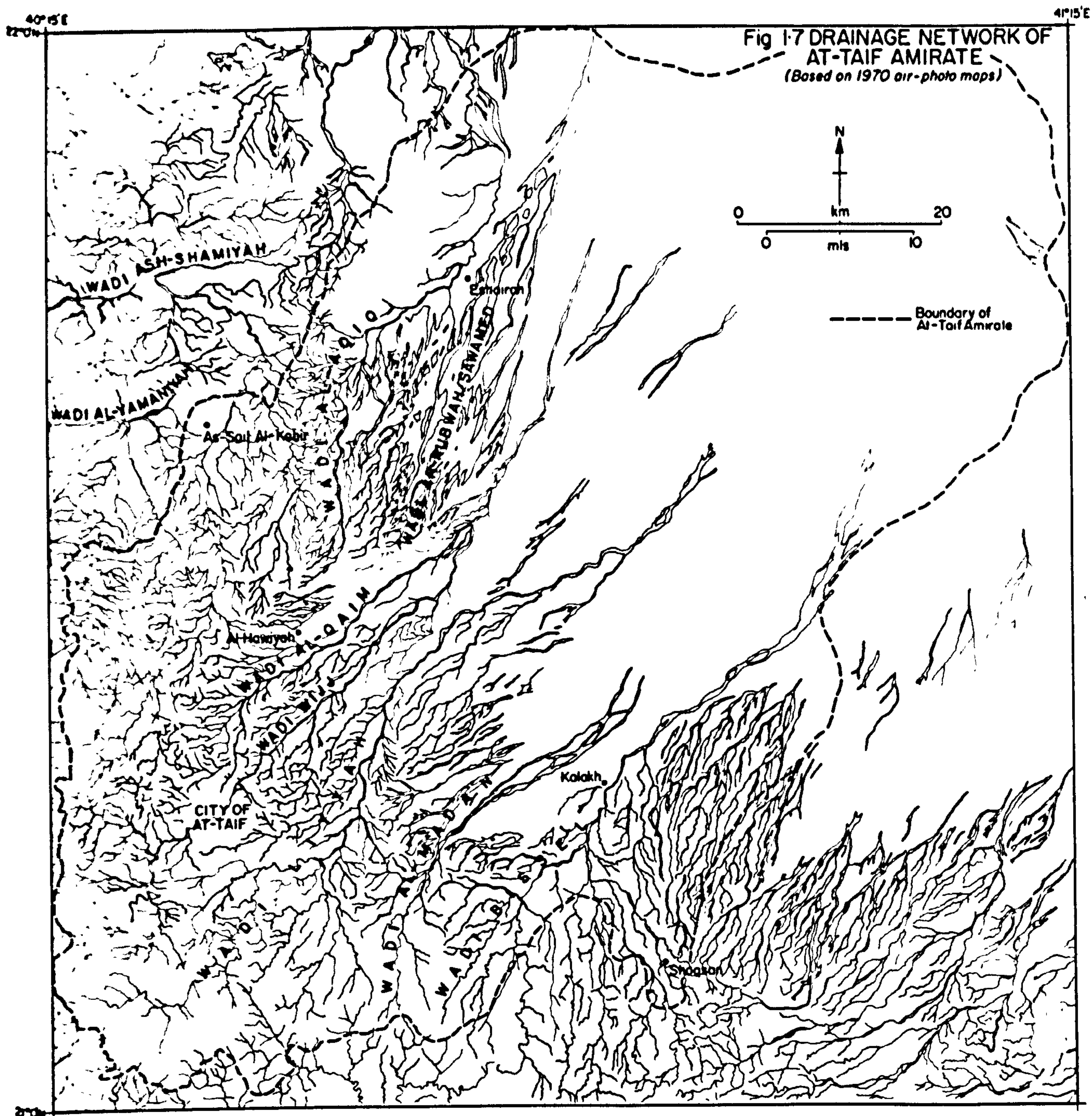




Plate 1.9

"Its tributaries - especially Jabajib - are well developed because of high runoff, resulting from the low permeability of the local schists. Alluvial deposits are very rare."

can be identified here compared with the lower parts of the study area, since these tributaries show a typically youthful form, being deep with steep sides. Al-Makhadhah, Shaqra and Imt are the main tributaries which form the main course. At an altitude of about 1,800m, Wadi Wijj flows through a region of rather different topographical characteristics. The land here slopes quite gently, and the wadi becomes broader with more alluvium. After this point, the wadi alters direction and follows the general slope prevalent in the study area, and now the wadi has reached the outskirts of the city itself. Here one can observe a large alluvial terrace measuring some 2 km by 1 km composed of fairly fine material, and which rises to more than 10m above the present level of the wadi. The gradient downstream of the wadi is not as steep, being around 10m per km compared with 13 m per km upstream of the dam. The dam, called Akramah, has been built here to hold back surface waters so that they may infiltrate into the terrace alluvium from which they are later extracted by means of drainage galleries. The wadi becomes slightly narrower through the city, a result of the illegal expansion of the adjacent residential area. It is also not much lower than street level because of the increasing amount of building rubble dumped by careless people into it. Incidentally, some of the main streets serve as water channels because of the absence of any drains.

Further downstream, the wadi begins to broaden and enters a flat area with fewer granitic inselbergs. Still further downstream, it becomes the Wadi Adwan and receives the water of other tributaries. The wadi here flows through a flat area at an altitude of approximately

1,350m. No further tributaries join the main course because of the very small amount of rainfall in this part of the study area. Below 1,250m it is possible to trace two distinctly separate parts of the main course towards the north-east. They are located at a distance of around 2-4 km from the main course, and extend for some 15 km. This phenomenon shows how the absence of regular floods allows erosion and deposition to obliterate the course. However, such separated sections might again join the main course whenever a heavy flood reaches this area, and so the total length of many wadis is changeable in relation to the strength and continuity of floods. The wadi main course, on the other hand, continues until it terminates on the plain at a level of about 1,150m. The full length of Wadi Wijj is about 110km. Its basin (including that of Al-Qaim) measures approximately 896 sq km in area.

(ii) Wadi Liyyah is another important water course of the study area. As in the case of Wadi Wijj, this wadi has its catchment area within the Amirate of At-Taif. The tributaries of Wadi Liyyah originate at 2,200m, while to the west the main tributary starts at 2,400m. This area, which is known as Ash-Shafa, is the highest part in the Amirate, and further downstream the wadi is called Ash-Shafa after the area through which it passes. Until this point, its direction of flow is almost due east, but below an altitude of 2,000m it changes direction and flows north-east. In due course, at approximately 1,900m, the wadi is known as As-Sail, i.e., the torrent. All the area from the source to this point exhibits what may be regarded as

'young' drainage characteristics - the valleys being deeply incised with an almost complete absence of alluvium. Perennial flow has kept the rocky courses free from detritus.

Only after reaching the level of 1,700m does the wadi have the name of Liyyah. The confluence between Liyyah and Uradah marks the last natural restriction in the width of the wadi because of the presence of more resistant dyke rocks. Wadi Liyyah becomes broader after the confluence and reaches a maximum width of 200-300m. Its flat bottom is composed of alluvial materials and is 10-15 m thick. This section of the wadi consists mainly of amphibolite schists and gneisses.

As-Sekhayrah, an important tributary, joins the Wadi Liyyah further downstream, and after that the wadi roughly follows the contact between the granites and the amphibolite schists until it is joined by Wadi Nikhb, flowing from the southern outskirts of At-Taif city where it is known as As-Sadad.

Further downstream of the confluence with Wadi Nikhb, the Wadi Liyyah broadens with a lateral expansion of alluvial deposits, composed almost exclusively of granitic sands, which however diminish in thickness. Bed rock occurs at depths of not more than 3-4 m, and at times outcrops directly in long stretches of the wadi bed. Below 1,500m, alluvium tends to become no more than discontinuous alluvial islets. On reaching the 1,400m level, the wadi receives the flow of other tributaries, of which Wadi Luwan is the most important, and this wadi itself has no continuous course since its channel is interrupted in many places by wind-blown deposits. After the confluence

with Wadi Luwan, Wadi Liyyah has an extremely wide course which extends for 15 km, ending in the area known as Ash-Shat, i.e., the coast. In its final 15 km, there are islands in its path of which the biggest is less than 2 km long and 300m wide. However, the broadest section of the wadi in this part is approximately 900m.

At 1,400m, where the wadi changes direction further to the east, it is possible to trace four separate parts of a former much larger Wadi Liyyah which once flowed in this direction. These four parts are almost 15 km long, but beyond this point there is no trace of the course for around 10km. After that, two branches of the wadi can be seen, which merge further downstream and are traceable for more than 6 km. During prolonged drought, these separated parts will be divided further and finally disappear. Wadi Liyyah has almost the same length as Wadi Wijj (110km). Its basin measures about 1,045 sq km in area.

(iii) Wadi Al-Madan is a small drainage system east of Wadi Liyyah. The upper reaches almost reach the 1,800-1,900m watershed dividing it from wadis flowing towards the Red Sea. Wadi Sallamah is its most important tributary, and at an altitude of about 1,600m the wadi becomes known as Al-Madan. Alluvial deposits, even along its upper courses, are extensive. Three kilometres upstream of the confluence between Al-Madan and Sallamah, a terraced zone along both sides may be observed. The alluvial cover is 1-2m thick and lasts for some 2km. Downstream from the confluence there is a fairly extensive zone of unconsolidated materials, consisting partly of altered granite

reduced to the state of granite wash, and partly of alluvial sands derived from the breakdown of the granites. The thickness of alluvial cover in no observed case exceeded 10m, but the crust of altered or fractured granite extends to greater depths (10-20m or more).¹⁴

Below an altitude of 1,550m, the wadi changes its name to As-Sirr and follows the general north-eastern gradient. This wadi for the next 30km shows very clearly many features of 'dying' water courses. It has clearly defined braided channels with bars and banks of alluvial material and shingle in between. This braiding has been encouraged because the banks of the wadi consist of easily eroded alluvium, sands and gravels. Its sinuous course is similar to that of any slow-flowing course, and oxbows, meander-belts and meander-terraces may be seen. The wadi's two mouths, more than 1 km wide, vanish entirely around the level of 1,350m in the Ash-Shat area. Wadi Al-Madan is around 52 km in length. Its basin measures approximately 284 sqkm in area.

(iv) Wadi Bissel borders the study area to the east and south-east. Many of its tributary sources lie beyond the study area. Since its upper reaches are located where the watershed changes alignment from west-east to northwest-southeast, Wadi Bissel flows directly from south to north. However, it changes direction later on towards the north-east regional slope.

Wadi Bissel at this point can be divided into two branches. The eastern branch, apart from the tributary of Wadi Mudhallalah, lies outside the study area. The western branch consists mainly of two

main tributaries : Wadi Biqran to the west, and Wadi Sakhayit to the east. These two wadis run in parallel lines, almost exactly north-east, reflecting the general geological grain of the country : alternating parallel bands of very fractured granites and granite-gneisses and of amphibolite schists and gneisses.¹⁵ These wadis resemble a typical 'mature' type with flat sides, gentle slopes and rounded forms. The upper parts of the former wadis (Wijj and Liyyah, for instance) have thus a very different appearance.

The generally pebbly alluvial deposits along these tributaries are not thick - about 2 m. When the westerly wadi Ash-Shaqrah and the easterly Wadi Al-Lihyan join the former two wadis and form one single wadi, more alluvial deposits do occur. Nevertheless, they are rarely more than 5-6 m thick. This single wide wadi is now known as Bissel. It runs north-easterly until it is joined by the eastern branch of the wadi's main tributaries, but beyond this point no further tributaries join the wadi - mainly because their mouths have been utilised for cultivation (Plate 1.10).

At an altitude of approximately 1,400 m, Wadi Bissel is known as Kalakh. As it runs towards the north-east, it becomes wider with islets in the middle of its course. As in the case of Wadi Al-Madan, Wadi Kalakh has many unconnected tributaries on its eastern bank - the work of wind erosion and deposition, and a sign of infrequent floods. After completing 15 km, the wadi takes the name of Sidyarah and reaches a width of 1 km in its whole length and just less than 2 km in some sections. No traces of the wadi are to be seen 15 km further on, as it vanishes completely in the plain at the level of just less than



Plate 1. 10
 Cultivation in the tributary mouth, Wadi Al-Qaim
 north of At-Taif city
 Page 42



Plate 1. 11
 Wadi Mihrim, near Al-Lawamiyah village
 Page 43

1,200 m. The full length of Wadi Bissel is about 96 km. Its basin (located within the Amirate boundary) is about 651 sq km in area.

It was mentioned previously that in the north-west of the study area are the upper courses of Al-Yamaniyah and Ash-Shamiyah (two important tributaries of Wadi Fatimah). Towards the extreme north, there are the upper reaches of Wadi Al-Aqiq and Wadi Ar-Rabwah/Sawamed. All these wadis are much larger in many respects, such as basin area, total length and extent of aquifer, than the wadis of the study area. They either drain westward towards the Red Sea (Al-Yamaniyah and Ash-Shamiyah) or continue running towards the north (Al-Aqiq and Ar-Rabwah/Sawamed).

The uppermost parts of the well-developed tributaries of Al-Amaq and Al-Ghadirain (both tributaries of Wadi Ash-Shamiyah) are to be found at a general altitude of 2,000 m in Al-Hada district. They run parallel from west to east to join the main course which heads north. However, because the mouth of Wadi Al-Amaq has been converted into cultivated land, it does not join the main wadi. Naturally, the separation is not permanent. Wadi Al-Ghadirain, on the other hand, changes its name in due course to Mihrim and runs in a tortuous path between the mountains (Plate 1.11). By 1,600 m level, it is known as Wadi Qarn. It takes four other names before becoming known as Ash-Shamiyah.

The tributaries of Al-Yamaniyah are located north of Al-Hada district. They run towards the north over sloping terrain from a height of 2,000 m with many signs of wadi capture. Wadis draining

westwards, with valleys which are being more actively eroded, have captured this zone. The point of capture (outside the study area) of Wadi Al-Yamaniyah is clearly visible to the west of As-Sail Al-Kabir district.¹⁶

In their upper courses, the wadis of Al-Aqiq and Ar-Rabwah/Sawamed run across a gently sloping area beginning at 1,500m and dropping to 1,400m over a distance of approximately 10km. These tributaries at this stage exhibit excellent examples of 'sluggish' water conditions, and as one moves downstream, at approximately 1,300m altitude, these conditions become even more evident.

The small amount of groundwater which is to be found within the study area necessitates active conservation of this already depleted resource. Wadi floods are believed to be the most important factor in the hydrological balance. In other words, rapid runoff provides the major source of recharge of subterranean sources. Despite the apparently frequent floods in the upper parts of the Amirate, only three wadi flow-gauging stations exist, as indicated below.

Wadi	Location		Starting date of regular data collection	Installations
	Latitude	Longitude		
Wijj	21° 15'	40° 21'	December 1966	Staff gauges
Liyyah	21° 13'	40° 28'	January 1964	Staff gauges; Automatic water level recorder
Bissel	21° 11'	40° 45'	January 1965	Staff gauges

These stations were installed in late 1959, but problems arising during station operation (for example, irregular staffing of stations) means that data collected in the early period lack continuity and reliability. Hence they are not analysed here. Since 1964, however, the situation has improved. Nevertheless, these stations do not give a complete picture of conditions in the study area which, as indicated before, differ greatly from one place to another. The general insufficiency of statistical records means that the basic relationships underlying the variable hydrological situation are not fully understood in the study area. For this reason, it is impossible to undertake a complete analysis, and any interpretation based on the available data might create a false impression of the long-term potential of the study area.

The recorded flood volumes in the three wadis are not as great as those recorded in large wadis outside the study area, which have larger collecting basins. Table 1.10 shows the annual flood volume of these three wadis. Volume clearly varies from one year to another.

TABLE 1.10
Annual Flood Volume (m³) in Three Major Wadis, 1964-69

Year	Wadi Wijj	Wadi Liyyah	Wadi Bissel
1964		4,026,191	
1965		136,865	285,445
1966		67,989	7,393
1967	25,289	168,737	2,121,430
1968	503,474	6,890,288	4,853,381
1969	28,874	6,189,749	1,088,760

Source : Ministry of Agriculture and Water, Hydrological Information, No 37, March 1970, page 8

It is quite common that a whole year, or perhaps several years, may pass without a single flood. On the other hand, more than one flood per year is also possible. There were three large floods in At-Taif city in 1968, because of floods of Wadi Wijj overflowing at the Akramah dam.

Maximum peak flow in m^3/sec is also highly variable in quantity and date of occurrence. Compared with big wadis located outside the study area, the flow is much smaller. For instance, Wadi Tarabah (east-southeast of the Amirate) discharged at its peak $2,000\text{m}^3/\text{sec}$ in April 1968. During that year, the wadi flowed continuously for more than three months. The highest discharge peak in the three wadis during the recorded period was recorded in Wadi Bissel on 17th April 1968. It reached a record of $280\text{m}^3/\text{sec}$, as indicated in Table 1.11.

Duration of flow is also variable, but Wadi Liyyah exceeds the other two wadis in this respect. This is because its upper tributaries are located in the Ash-Shafa district, which receives the highest amount of rainfall in the study area (see Fig 1.6). As mentioned in Table 1.12, there were 3,268 flow hours in 1969. There were 2,426 flow hours in 1968. The recorded duration for the other four years varied between 19 and 990 flow hours. The other two wadis show similar variability. A whole month of wadi flow is not rare in the Amirate. The Table shows also that Wadi Liyyah flowed for 744 hours in March 1969 and also in May 1968 : during these months, total volumes of 1,259,746 and $1,232,833\text{m}^3$ were discharged. As a further illustration of the great variability which exists, Wadi Wijj (which

TABLE 1.11
Peak Flow Magnitudes (m³/sec) in Three Major Wadis, 1964-69

Year	Wadi Wiji	Wadi Liyyah	Wadi Bissel
1964		189.72 on 21st August	33.58 on 22nd November
1965		1.90 on 8th October	0.52 on 26th April
1966		12.67 on 28th August	124.97 on 27th October
1967	1.54 on 9th May	4.63 on 5th March	280.00 on 17th April
1968	41.76 on 17th April	240.00 on 18th April	28.08 on 5th January
1969	1.10 on 2nd September	102.21 on 5th January	

Source : Ministry of Agriculture and Water, Hydrological Information, No 37, March 1970, page 8

TABLE 1.12

Duration of Flow (hours) in Three Major Wadis, 1964-69 .

Year	J	F	M	A	M	J	J	A	S	O	N	D	Total
<u>Wadi Wiji</u>													
1964													
1965													
1966												-	
1967	-	-	-	-	8	-	-	-	-	-	3	-	11
1968	-	-	-	8	-	-	-	-	-	-	1	-	9
1969	4	-	-	-	-	-	-	3	6	-	-	-	13
<u>Wadi Liyyah</u>													
1964	532	185	-	47	-	-	81	31	114	-	-	-	990
1965	-	-	-	-	14	-	-	18	-	92	-	-	124
1966	-	-	-	-	-	-	-	-	-	19	-	-	19
1967	-	-	9	-	-	12	-	-	-	2	15	-	38
1968	-	-	-	297	744	716	328	222	20	-	99	-	2,426
1969	635	672	744	533	662	-	20	-	2	-	-	-	3,268
<u>Wadi Bissel</u>													
1964													
1965	-	-	-	-	4	-	-	13	4	-	5	-	26
1966	-	-	-	5	-	-	-	-	-	4	-	-	9
1967	-	-	7	-	-	-	-	-	-	9	6	-	22
1968	-	30	-	55	-	7	3	-	-	-	-	-	95
1969	48	21	15	-	-	-	10	5	-	-	-	-	99

Source : Ministry of Agriculture and Water, Hydrological Information, No 37, March 1970, page 12-19

passes At-Taif city) on 17th April 1968 had a total discharge of $501,300\text{m}^3$ in only 8 hours (Plate 1.12); $1,322,236\text{m}^3$ were recorded in only nine hours on 27th October 1967 in Wadi Bissel. These dangerously high rates of discharge certainly exceed the amount of recharge considering the nature of the underlying rocks and the small volume of alluvial deposits. Accordingly, the comparatively small aquifers in the study area make the absorption of high run-off impossible.

Probably the best solution to this problem is to construct dams at suitable sites across the wadis to capture the flood water. A dam on Wadi Liyyah with a large storage capacity and reservoir area is under construction. The high rates of evaporation ($3,143\text{mm}$ annually)* and the rapidly increasing rate of siltation tend to decrease the amount of water stored. However, the great need and the increasing demand for water has given a high priority to the construction of dams. Constructing dams on such wadis might shorten their length in the long term, since floods will be stored and prevented from approaching or reaching the mouths.

In view of the climatic and physiographical conditions within the study area, the need to create a permanent supply of water has long been realised. The recent growth of population, both permanent and temporary, has inevitably led to greater concern about the problem, although attention has been given to the use of water resources over many centuries. As long ago as 677-678AD, the date of the

* 1967-1973 average, At-Taif city general station



Plate 1. 12

Damage caused by Wadi Wijj flood, At-Taif city
(Courtesv An-Nadwah daily newspaper of Makkah, no 2806, 27th April 1968)

earliest known inscription giving the date of construction of a dam testifies to this. The pattern of use has taken many forms - including, as we have noted, dams and ains. Water supply and demand, and irrigation schemes will be discussed more fully in Chapters 2 and 7.

SOIL

No comprehensive study of the soils of the study area exists - only a few surveys concerned with selected places, and written for specific purposes. Most of the scientific investigations in this field were undertaken for the Government by Italian firms : Italconsult in the late 1960's, and Sauti in 1972. The first carried out its work in agricultural areas, aiming to determine the thickness of the permeable material (alluvium and weathered rock), while the second concerned itself only with the residential area of the city of At-Taif, investigating the load-bearing capacities.

Soil in the study area has developed under the influence of several factors. Variations in parent material have given variety to soil pattern. Physical breakdown has been increased by temperature changes, winds and floods. Relief has, for example, enhanced transport and slope wash. Man should also be regarded as another factor of great importance, particularly as the area has long been inhabited. On the one hand, misuse of the soil has had obvious results, such as the effects of over-grazing, and of moving soil for construction purposes. On the other hand, man's influence in controlling and

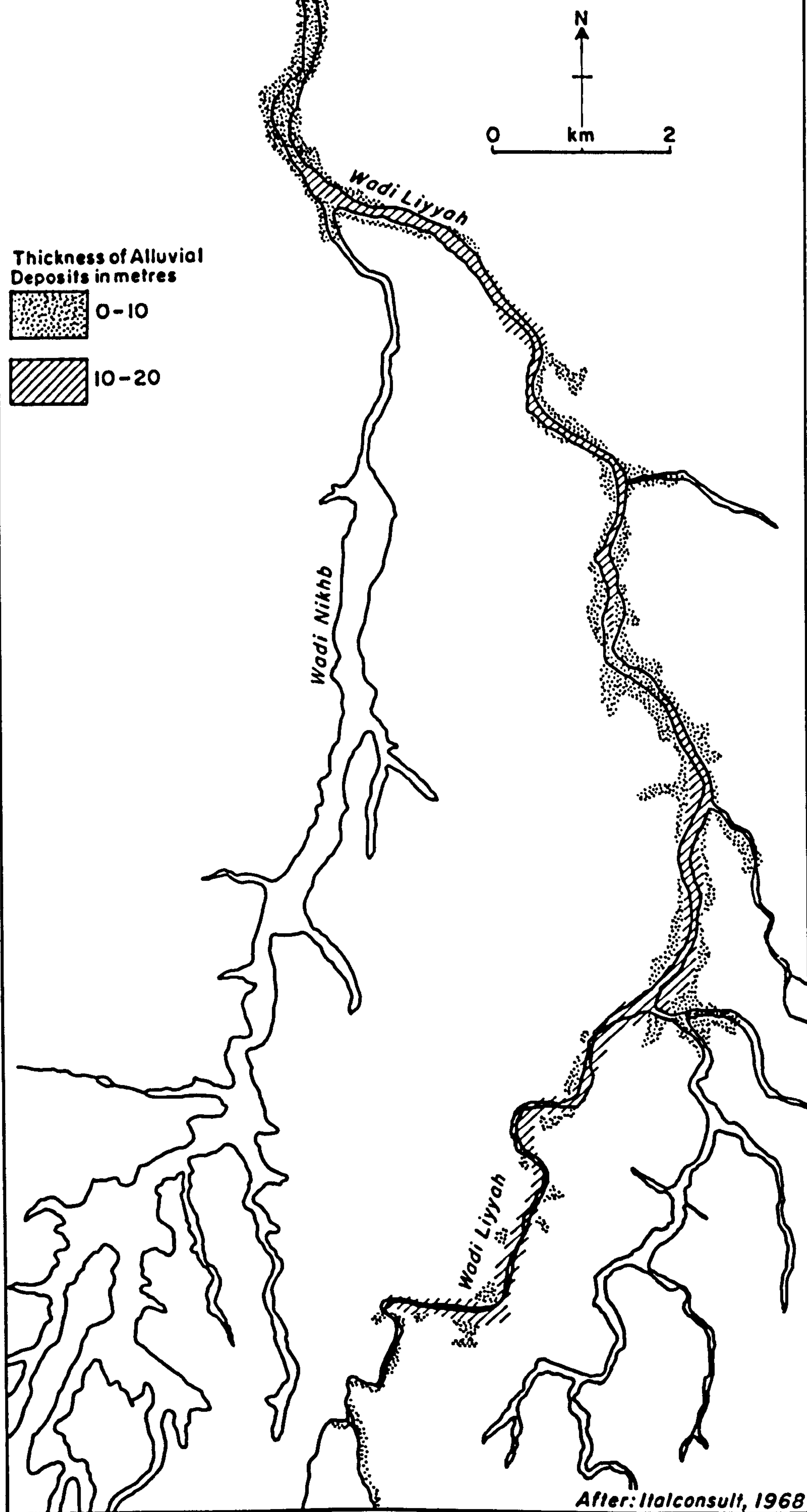
distributing flood water, and hence flood sediment, has had a profound effect, promoting the development of finer textured alluvial soils. The evolution of the various soil types can only be understood in this framework.

Thickness of soil varies quite remarkably within the Amirate of At-Taif. Most of the uplands, for instance, have either no soil at all or only a very thin covering (see Plate 1.9). Such paucity of soil is directly related to the prevalence of steep slopes and surface wash, factors counteracted to some extent by the use of terraces and weirs. The lower parts of wadis do not have thin soils : they are continually supplied with fresh sediment. Figure 1.8 shows the thickness of surface deposits in the middle course of Wadi Liyyah between Bilad Auf and Ar-Rashadeen. Over almost half this section of the wadi, the deposits have a thickness of 10-20m; the rest has less than 10m (see p 39).

Soil types, unfortunately, have not yet been classified in the study area, but some general remarks can be made. Stone content is usually high, and a predominantly stony horizon is not uncommon. Depositional material washed down from the mountains becomes finer with increasing distance from them. Sand content is also relatively high. Wadi bed soils consist of mixtures of sand and gravel with frequent stones, but they can be easily eroded because of their friable and unresistant structure. Accelerated erosion and truncation of the soils occur widely - they are both spectacular and serious. In the plain of Rokbah and adjacent areas, such wadi material gradually grades into sands, mainly of aeolian origin, with increasing distance

Fig.1-8

THICKNESS OF ALLUVIAL DEPOSITS,
WADI LIYYAH, BETWEEN BILAD AUF AND
AR-RASHADEEN



After: Italconsult, 1968

from the outlets of the wadis. A driller's log of a well sited downstream of Akramah Dam on Wadi Wiji is as follows:-¹⁷

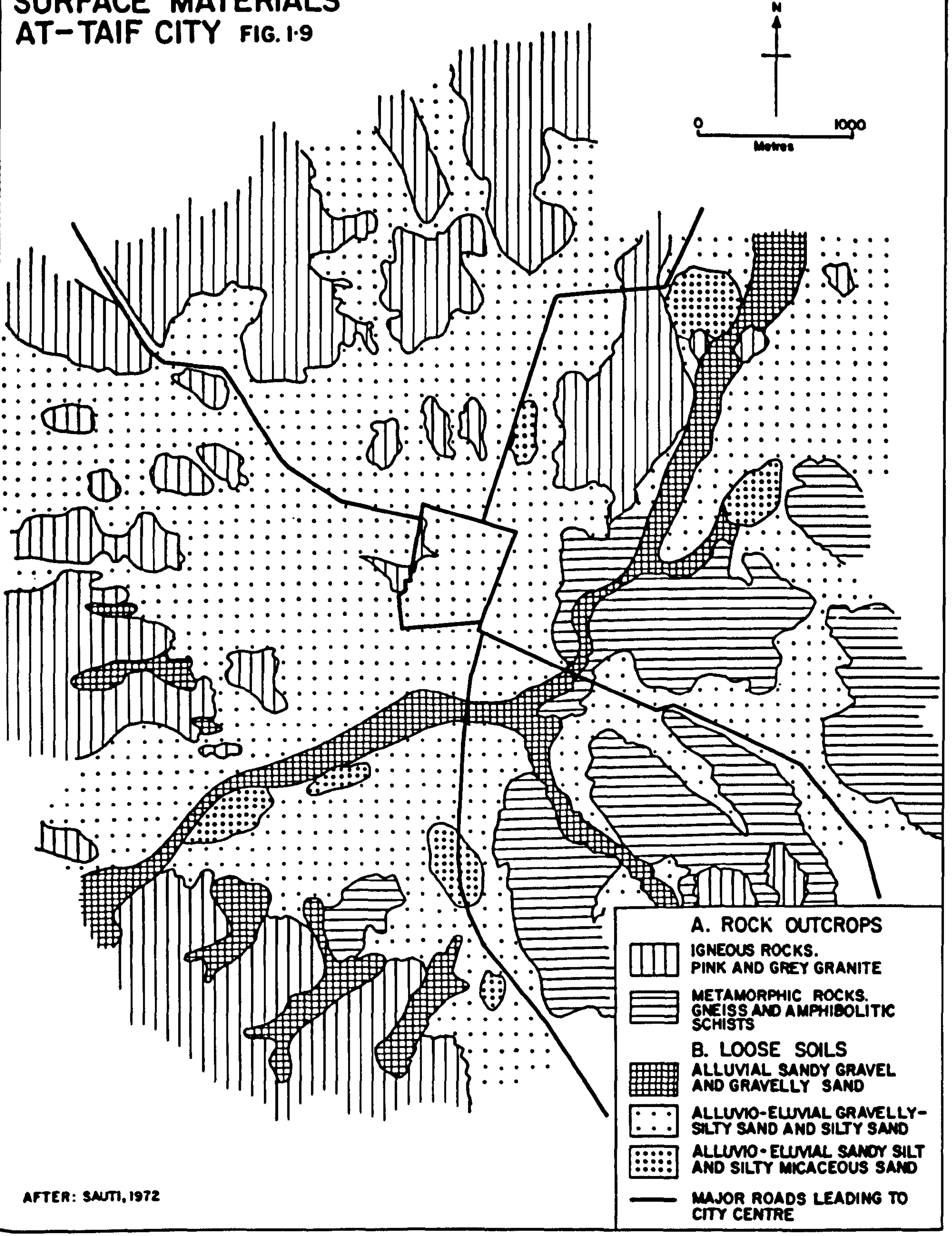
<u>Depth in Metres</u>	<u>Material</u>
0- 2	Sand and gravel
2-14	Very coarse sand and gravel
14-22	Sand and gravel with pebbles and weathered granite boulders
22-28	Weathered crystalline rock

The investigations carried out in the city of At-Taif¹⁸ indicated the following types (Fig 1.9).

1. Loose soils consisting of a mixture of sand, silt and gravel in varying proportions. These may be subdivided as follows:-
 - (a) "Alluvial-eluvial silty sand and gravelly, silty sand of mixed origin which forms a thick cover: the most prevalent soil.
 - (b) Alluvial sandy gravel or gravelly sand which fills the beds of the wadis.
 - (c) Alluvial-eluvial sandy silty and silty sand."
2. Rocks of igneous and metamorphic variety, outcropping around the city and also at places within the city itself.

Since the parent materials are mostly rocks of the Precambrian Arabian shield, the soil is rich in minerals. There is no dominant salinity or alkalinity problem. On the other hand, soils are humus-deficient, which has been remedied to some extent by using farmyard manure and, quite recently, by poultry and chemical manures. Soils in the Amirate of At-Taif are well leached. It may be said, therefore,

SURFACE MATERIALS AT-TAIF CITY FIG.1-9



AFTER: SAUTI, 1972

that the study area has potentially fairly rich and fertile soils. The soils are capable of supporting annual crops, such as alfalfa, and tree crops, such as almonds. However, scarcity of water is one of the major factors limiting agricultural development in the study area, as in the rest of the country. When the rains come abundantly, or when irrigation is applied to a new area, plant growth is remarkably rapid.

BIOGEOGRAPHY

(a) Flora

The Amirate of At-Taif, together with southern Al-Hijaz and Asir, is believed to have the richest flora in Saudi Arabia. This may be attributed to the interaction of many factors, including amount of rainfall, cloud cover, comparatively low temperature, and high altitude. These factors imply also that the flora of these mountainous areas is related more closely to that of the East African Highlands and also to those of the Mediterranean floristic regions than to the flora of the rest of Saudi Arabia, which is Saharo-Sindian.¹⁹

Since rainfall, cloud, temperature and altitude differ remarkably in their strength and effect within the study area, a complex and variable pattern may be expected in the distribution of the various species. A notable asymmetry in distribution may be observed when travelling through the study area from east to west, i.e., from the plain (as low as 1,050m) to the uplands (up to 2,500m). (The changing ecology is appreciated by travelling on the part of the Trans

Arabia Highway which climbs Jabal Kara and links the uplands with the Red Sea plain. The 1,200m height difference between the base and summit of Jabal Kara has provided a chance to observe the rapid change of flora.) For example, the three main species which can be observed descending from the uplands towards the plain in the study area are as follows:-²⁰

1. At heights of not less than 1,700m, the juniper (Juniperus procera) is the dominant tree. Its abundance and robust growth increases with height.
2. The wild olive (Olea chrysophylla) may be seen first at 1,500m, but it increases in number at greater heights. Its fruits, which never develop fully, provide food for baboons.
3. The acacia association is represented by about eight different species in the study area, which may be seen between 1,800 and 1,050m. At high altitudes, Acacia asak is the dominant species, while Acacia tortilis predominates at low altitudes.

The flora of the study area is in great danger. Man has destroyed much of the valuable vegetation cover, and despite the fact that the Government has issued a circular (No 5028, dated 18th October 1958), signed by the Prime Minister, laying down penalties for felling trees, considerable destruction still continues. However, only a few cases of felling are reported and dealt with by the authority responsible (Bedouin Department, At-Taif Police) - only 25 cases during 1971-72 - which stems largely from the absence of complete and powerful supervision over the protected area. Guards are employed to little effect, largely because they are employed on their own tribal

lands and among their kinsmen, and only report felling by strangers. Furthermore, as this circular only dealt with the felling of green trees, many illicit methods have been used to avoid punishment : for example, pouring petrol on the subsoil underneath the tree; digging for the roots to let them dry, and subsequently removing the tree itself (Plate 1. 13); and notching the trunk and thus rendering the tree susceptible to being snapped off by the wind (Plate 1. 14).

The rate of felling has been increased by the high demand for firewood in the study area from urban, rural and semi-nomadic populations. While urban populations require firewood mainly for outdoor cooking, at coffee houses, bakeries and wedding ceremonies, rural and semi-nomadic populations regard it as an essential daily need. A visit to the city of At-Taif firewood auction gives some idea of the amount felled. This auction (Plate 1. 15) had about 1,000 piles in September 1971. By August 1973, the size of the auction had increased to about 1,300 piles. However, in addition to depletion caused by felling of trees, the flora of At-Taif Amirate has been reduced by over-grazing, especially by the notorious goats.

To preserve what is left of the flora (and this is not very much), heavier penalties must be introduced. At the same time, consumers should be directed and even ordered to use other means of energy - for example, cheap paraffin or gas. Introducing educational programmes and advertisements in the press, and on radio and television, would definitely raise the awareness of the public and increase respect for the countryside. Enlarging existing reforestation projects, and, more important, ensuring that these forests are



Plate 1.13

Illicit removal of trees in process. The acacia will be removed when dry. Wadi Masarrah, north-west of At-Taif city

Page 55

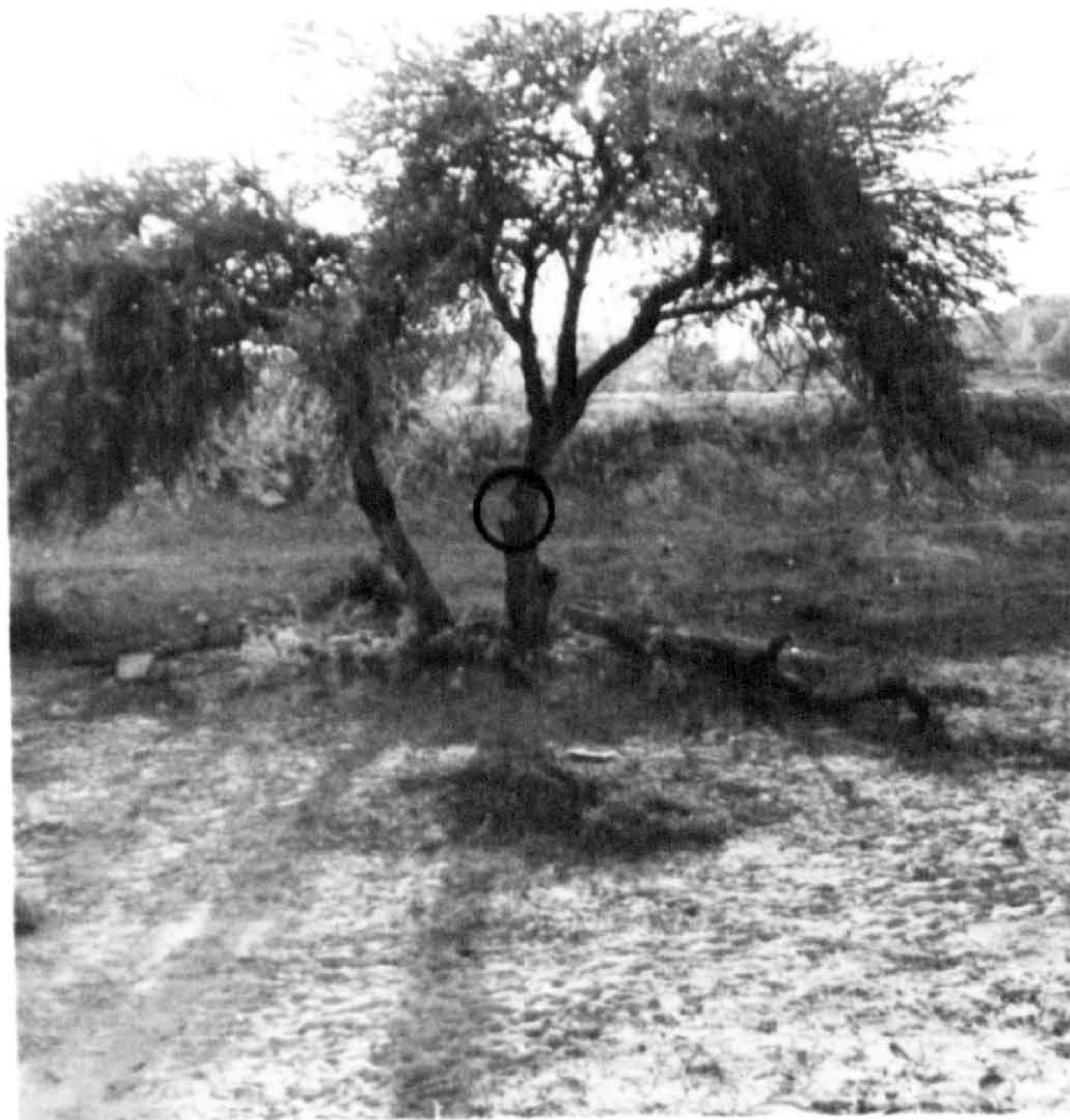


Plate 1.14

Illicit removal of trees. The acacia has been notched and is thus a candidate for overthrow. Kamlah, north-east of At-Taif city

Page 55

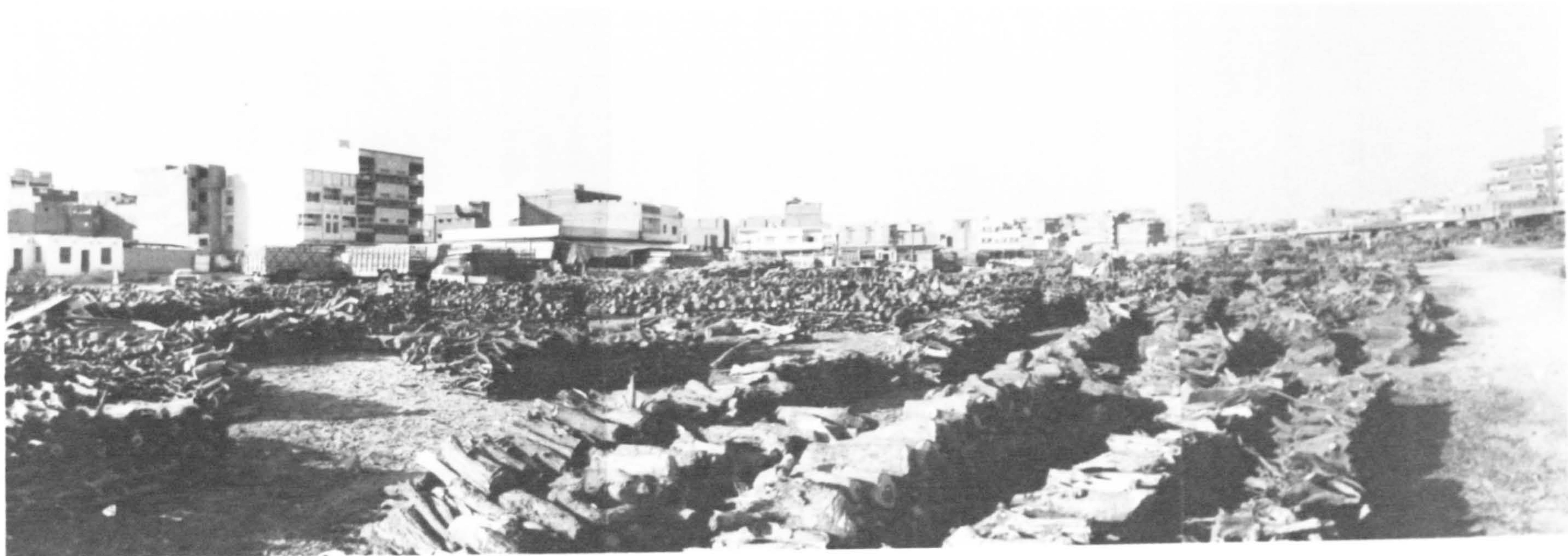


Plate 1. 15
Firewood auction, At-Taif city, 1971
Page 55

well protected after planting, would also be of great importance.

(b) Fauna

Saudi Arabia is a country where three different zoo-geographical regions meet. The country is mainly included in the Palaearctic region, but there are some Oriental elements on the eastern coast, and a large Ethiopian element in the south-west, including the study area.²¹

The remarkable variety of vegetation in the Amirate, the terrain and the climate, among other factors, have encouraged wild life. Unfortunately, no inventory of the fauna has yet been made. However, there are a few reports on different aspects, most of which have been written by interested travellers.

The numbers of wild animals differ greatly from one place to another and from one species to another. Baboons are probably the most numerous large animals. Hyenas, wolves and jerboes are among the more frequent predators. Hedgehogs, porcupines and hares may be seen almost anywhere. The study area is believed to possess a wide variety of insects, and is also of considerable ornithological interest. The preservation of the fauna may be justified on several grounds, aesthetic and scientific grounds in particular, but also quite generally as part of the integral development of the country.

The activity of man has had great and far-reaching effects on animal life. A traditional lack of sympathy for wild life and conservation, and virtually continuous hunting have resulted in the near

extinction of many species, some of which were of great beauty and interest. The plain of Rokbah (in the north-northeast of the study area), for example, is no longer famous for its large numbers of gazelles. Philby, who joined the Royal camp there in the summer of 1934, estimated that they were being killed at a rate of 200-300 head a day, often even faster. Such operations, according to Philby, have had disastrous effects on the country's fauna.²²

Since then, moreover, destruction has continued. Increases in well-equipped vehicles, and improved weapons have helped to fill the bags of hunting parties. Water and petrol carriers have enabled larger journeys. Hence the Government has been obliged to issue a decree prohibiting hunting. Unfortunately, it has had little effect, since much of the hunting is done by the richer classes, whose activities lie beyond the law, and by many negligent and careless people, either for fun or for money. Nevertheless, the decree at least has had the effect of preventing complete extermination and of awakening the nation's sympathy towards wild life. Improvement requires above all a strict law prohibiting shooting and forbidding the collection of live specimens.

REFERENCES

1. US Geological Survey and Arabian American Oil Company, Geology of Southern Hijaz Quadrangle, Miscellaneous Geologic Investigations, Map 1-210A, Scale 1:500,000, 1962
2. Kowther, J, Preliminary Geologic Report on the At-Taif Area, Saudi Arabia, and an Approach to the Search for Tungsten, Technical Letter No 46, Saudi Arabian Mineral Exploration, Jeddah, 1966
3. Goldsmith, R, and Kowther, J, Notes on Field Trips to the At-Taif - Bilad Zahran Area, Saudi Arabia, Technical Letter No 47, Saudi Arabian Mineral Exploration, Jeddah, 1966
4. Goldsmith, R, Mineral Resources of the Southern Hijaz Quadrangle, Kingdom of Saudi Arabia, in Mineral Resources Bulletin 5, Directorate General of Mineral Resources, Jeddah, 1971
5. Yakut, Mojam Al-Buldan, vol 4, Beirut, 1957, p 9 (Arabic)
6. Central Planning Organisation, Development Plan, Ar-Riyadh, 1970, p 210
7. Okaz Daily Newspaper of Jeddah, No 1308, 8th March 1969, p 8 (Arabic)
8. Ministry of Finance and National Economy, Omm Al-Kora : the official calendar of Saudi Arabia, Makkah, 1974-75 (Arabic)
9. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 2, Hydrologic & Climate Investigations, Rome, 1967, pp 6-8
10. Ibid, pp 7-8
11. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 5, Geophysical Investigations, Rome, 1967, pp 66-70
12. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Final Report, Rome, 1969, p 24
13. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 3, Geologic Investigations, Rome, 1967, p 21
14. Ibid, p 26

15. Ibid, p 26
16. Ibid, p 15
17. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 4, Groundwater Investigations, vol IV, Rome, 1969, p 79
18. Sauti, City of Taif (Improvement and Beautification of Urban Streets) Phase 1, Preliminary Project, 1972, pp 37-38
19. Arabian American Oil Company, Aramco Handbook, Dhahran, 1968, p 199; and Fisher, W B, The Middle East, London, 1971, pp 89-90
20. For details, see : Vesey-Fitzgerald, D F, The Vegetation of the Red Sea Coast North of Jeddah, Saudi Arabia, in The Journal of Ecology, British Ecological Society, vol 45, 1957, pp 547-562
21. Mattingly, P F, and Knight, K L, The Mosquitoes of Arabia in Bulletin of the British Museum (Natural History) Entomology, vol 4, No 3, March 1956, pp 91-141
22. Philby, H, Saudi Arabia, London, 1955, p 316; and Arabian Days, London, 1948, p 301

PART TWO

SETTLEMENT AND POPULATION

CHAPTER 2

THE CITY OF AT-TAIF

Origin

At-Taif is held by early Arab historians as a madinah jahiliyah, i.e., a pre-Islamic town. Some early writers talked of it as a "pre-Flood* settlement" which was inhabited by the Bano Mihlaeel : a long-since vanished tribe¹. According to early writers, many other tribes followed and then disappeared, of which the Biblical Amalekites and Thamud were the most notable. But, personal observation and reading by the writer suggested that there are no observable signs of this distant past, and since no archaeological work has so far been undertaken, it is rather difficult to reconstruct its early history.

As a neighbour of the holy city of Makkah, and the resting place of the Prophet's cousin, Abdullah Ibn Abbas, more attention was given to it from the early Islamic period onwards. As a result, a remarkable amount of material has accumulated about the place through the ages. Almost all these works are devoted, however, entirely to laudatory references; these are the terms typically used. No real attempts to discuss the town, however, have been made from the point of view of a geographer. The situation was worse for pre-Islam At-Taif, since it was considered as the remains of al-moshrekeen, i.e., the heathen, and so not worthy of recording.

* Flood, in the sense of the Flood of Noah.

Evolution

Regarding evolution, I have divided the known eras through which At-Taif has passed in a very general way, since this material is, in the main, purely historical. Only points that have influenced its present condition are mentioned. This was the situation down to 1924, the year when At-Taif came under the rule of the House of Saud. The Saudi period is, however, much more important, and it is therefore more closely considered, divided into parts in accordance with facts as will follow.

A. Pre-Islam

It is reported² that At-Taif was originally a walled settlement inhabited by the tribe of Thakif. It had two gates : Saab and Sahir, the first being for the Yasar clan and the latter for the Auf clan. Many attempts to capture and occupy the settlement failed, so it is described by other Arabs as being well defended : it was regarded as the second settlement in Western Arabia and ranked next to Makkah. It even had advantages over Makkah itself, being surrounded by fertile land with a moderate climate which has made it suitable, for example, for growing vines. A single area, called Al-Wahat, which was later sold to Amr Ibn Al-Aas (the conqueror of Egypt) is reported to have contained one million vines³. It was the wine industry, in addition to other products absent in Makkah and its region, which made At-Taif rich. All these advantages are subsumed in Al-Lat, the ancient Arabian goddess who had her principal sanctuary here, and by the presence of Suq Ukaz (market) which was contemporaneously considered as the greatest, social, cultural

and business rendezvous in the whole of Arabia. All these advantages made the Thakif tribe of At-Taif the sole major competitor to the Koraish of Makkah, who are better known as the principal traders of Arabia. Hence Thakif is described by Yakut (1174-1229 AD) as "enjoying the happiest life among the Arabs"⁴.

The site of this settlement must have been on the southern side of Wadi Wijj, somewhere in the area between Hawaya to the north, and Shehar to the south. Indirect evidence in early writings supports this idea, and the local learned believe this also. The evidence rests in outline on two points (Fig 2.1).

1. The Prophet, during his first visit, left At-Taif (now Hawaya and Shehar quarters) towards Al-Mathnah, while the children of At-Taif who were following him had not reached it, i.e., there was some distance between them.

2. It is reported that the Prophet's army camp (now where his companions' graveyard and the Ibn Abbas mosque lie) was at a 'safe' distance from At-Taif's wall, i.e., At-Taif was sited at some, but not great distance from the south of the Ibn Abbas mosque, and east of Al-Mathnah.

B. The Islamic Period

At-Taif, unlike Makkah, did not fall to the Prophet's army, which besieged it without success in 9 AH - 630 AD. A year later, however, At-Taif accepted Islam and hence became part of the new state. The site of At-Taif inhabited by non-Moslims was abandoned by the Moslims themselves who chose for their settlement the area next to the Prophet's

THE SITE OF PRE-ISLAMIC AT-TAIF (based on the writer's fieldwork) Flg.2.1

1 Al-Koa Mosque

2 Addas Mosque

3 As-Sinasy Mosque

4 Ar-Rayah Mosque (site of the Army Flag)

5 Companions Graveyard

6 Ibn Abbas Mosque

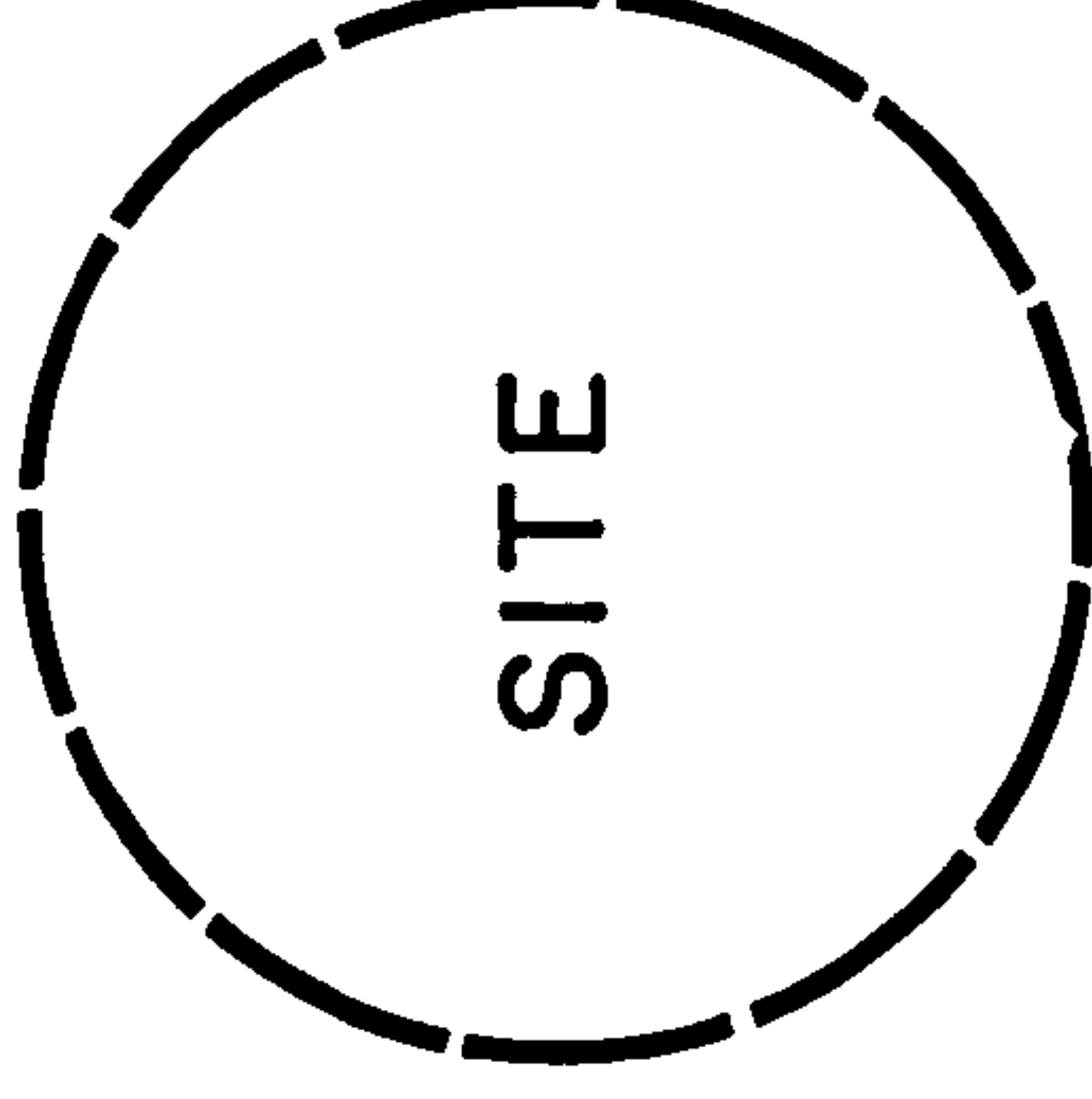
3-
5-4
6

Wadi Wiji

Al-Mathnah

1-
2-

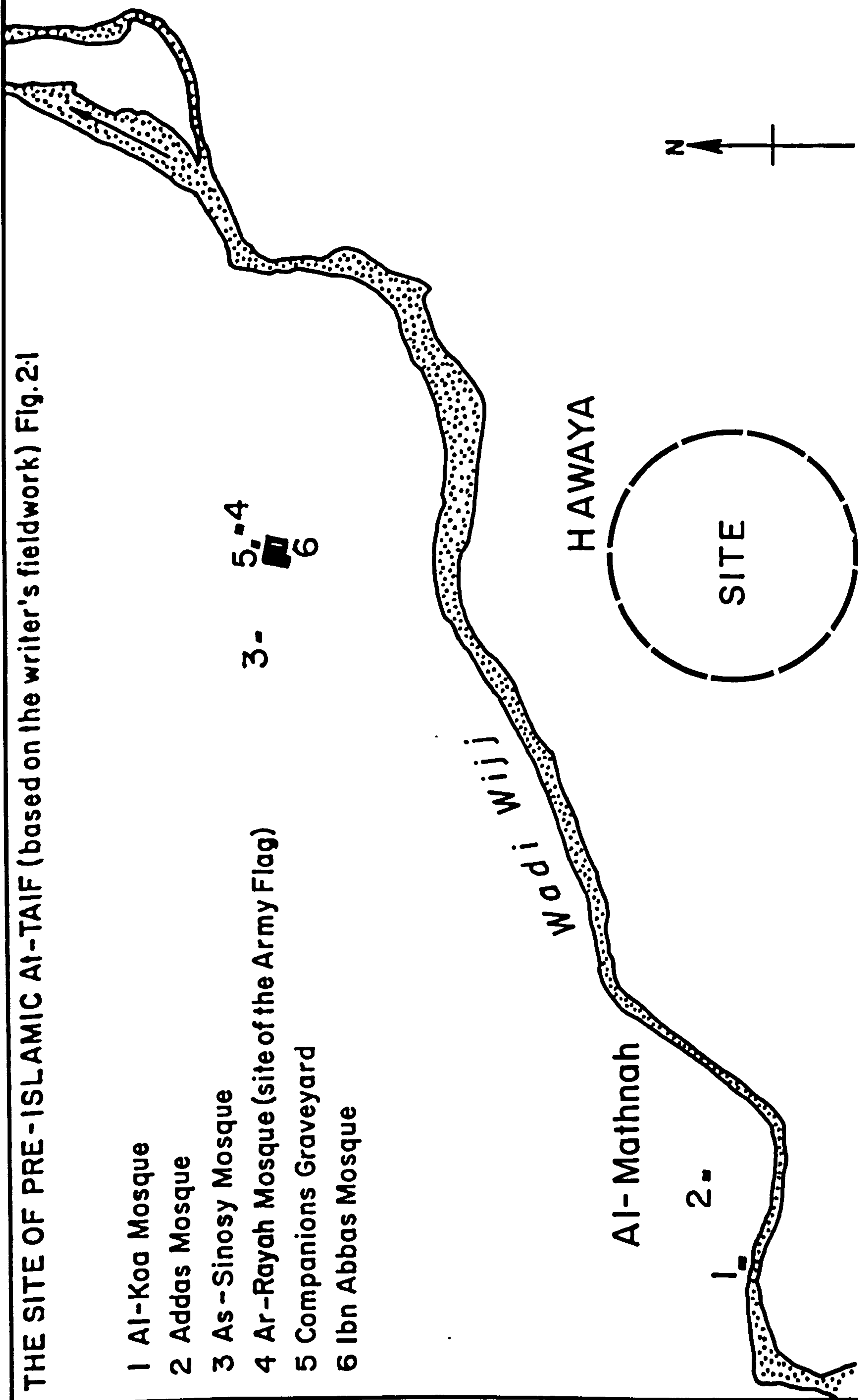
HAWAYA



SHEHAR



0 metres 1000



companions' graveyard and Ibn Abbas mosque where he lies buried. This mosque, which has the advantage of being next to the burial place of the Prophet's cousin and companions, has since become the nucleus of the present settlement. At times, however, this core was abandoned, when the people migrated to adjacent places such as As-Salamah and Karwah, for two main reasons. The first was that it became uninhabitable because it had been reduced to a ruinous state for several reasons - a case that is common in the history of Arab settlements. The second is that part of it became a cemetery, and no prayers were held in Ibn Abbas mosque, which itself became part of the cemetery.*

By 630 AD, Al-Madinah replaced Makkah as the seat of Government headquarters. Shortly afterwards, the seat shifted further north to Syria and Iraq, which became the focus of Islam's golden era. The movement of the administrative headquarters from Makkah to Al-Madinah and then to Syria and Iraq undoubtedly weakened the importance of not just At-Taif, but the whole area. The decline was gradual. For instance, At-Taif had its own governor who was directly appointed by the Caliph, but later on it became attached to Makkah. In addition to these losses, the area lost many people who spread into wide areas in order to propagate the faith and advance Moslim power. The famous Suq Ukaz had closed down by 129 AH - about 750 AD. The vine yards declined sharply as wine making became prohibited. Yet, the

* Sharif Zaid Ibn Mohsin ordered (as early as C 11 AH - late C 16 AD) that people should pray in the mosque and stop using it as a burial place. Al-Ojaimi, H (1639-1702), Ihda Al-Lataif min Akhbar At-Taif, revised edition by Saati, Y, Ar-Riyadh, 1973, p 75 (Arabic)

settlement itself persisted as a "bulaidah" (little town), but Yakut diminished it further by adding the extra description "small" even to "bulaidah". He clearly indicated that it was unworthy of its luxurious reputation.⁵

C. Ottoman At-Taif

When the Ottoman Turks abolished the Mameluke Sultanate of Egypt in early C 16 AD, the Sharif of Makkah accepted their rule directly over his country, which included At-Taif. This era, notorious for general insecurity within the settlement and outside it, eventually made At-Taif a garrison. The advent of Wahhabism in central Arabia in the second half of C 18 AD then increased its importance, since the town was regarded not only as capable of defending Makkah, but also the wider region. The price of a highly strategic site has been considerable. J L Burckhardt, who visited At-Taif in 1814, described the town, which had fallen to the Wahhabis in 1808, as being "in a state of ruin, for but few houses in complete repair". He counted in this formerly "commercial town" "where everything denotes great misery" about fifty shops.⁶

Though the Wahhabis were defeated in 1813, At-Taif developed only slowly. This was mainly due to the overall low income of the state, and the poverty of the people. In 1879, C M Doughty, though he admired it, pointed out the ruinous aspect of the town.⁷ A few years later, in May 1883, Mohammad Sadik Pasha* gave a more optimistic and fuller picture of the town. He noted that there were 400 houses inhabited by 2,000 people, 200 shops, 13 mosques, two slaughter-

* This Egyptian engineer officer had for several years accompanied the Egyptian pilgrim caravans and the mahmal in an official capacity

houses, a military hospital, a Turkish bath, a Government building and a castle.⁸ Unlike Doughty, who was in real danger, the Pasha moved around freely in addition to the assistance offered to him because of his rank. Furthermore, his visit coincided with the town's business and trade peak : the summer, which in that particular year was also the season of Ramadan. Also, during the summer months, the Sharif of Makkah , the Wali of Al-Hijaz, the army command and headquarters, and all Government offices moved to At-Taif from Makkah and Jeddah.

D. Hashemite At-Taif

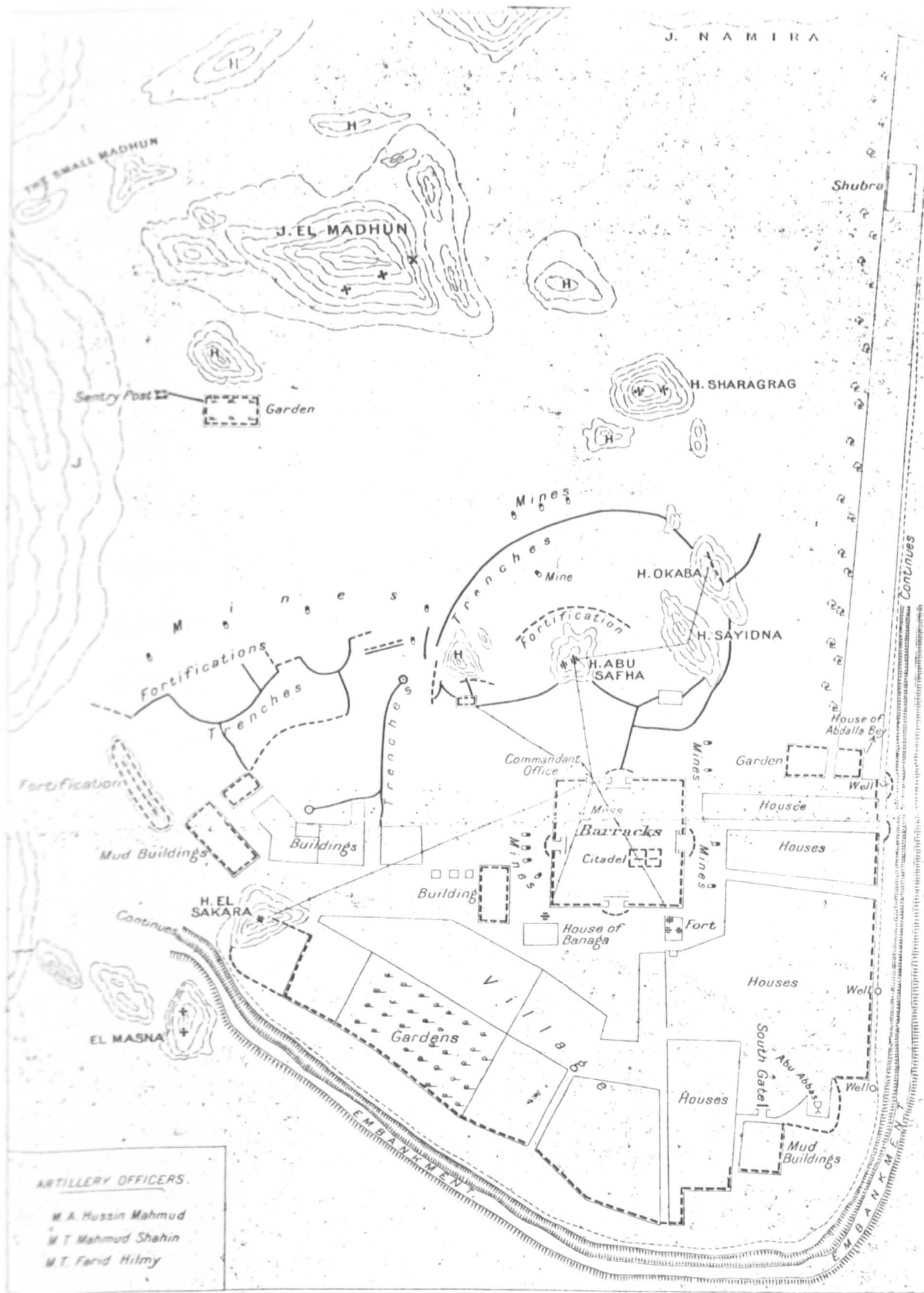
At any rate, and whatever the stage of progress At-Taif had reached, it did not last for too long. The outbreak of the Arab rising against the Ottomans and the seige of At-Taif, led to its surrender in September 1916, after gun battles that destroyed part of the settlement and its surroundings. The field sketch (Fig 2.2) of the town and its surroundings, which was made by the Artillery on September 25th 1916, shows its military importance clearly. K Az-Zirikly, who had visited At-Taif a few years later, indicated that almost half of its 10,000 inhabitants had left because of the war : and the head of the town municipality informed him that there were around 1,500 houses there.⁹

E. Saudi At-Taif 1924-1944

After less than one decade of rule, the Hashemite Kingdom of Al-Hijaz was brought to an end by the ruling family of central Arabia : the House of Saud. The destruction of this Kingdom was started by an attack on the town of At-Taif, which fell in September 1924. Eldon Rutter, who visited it in February 1926, said that it is "almost devoid

Fig 2.2

Field sketch of At-Taif Town, by the Artillery, September 25th, 1916



S.S.C.S. No 2828

War Office, Dec. 1916

Scale
 YARDS 0 100 200 300 400 500 1000 1500 YARDS

1:10,800

YARDS	FROM	TO
1750	El Madhun	Abu Safha
2200	—	Barracks
2600	—	Citadel
2400	—	Banaga
1850	El Masna	Citadel
1000	Massra	Abu Safha

REFERENCE	
Communication Trenches	—
Fortifications & Trenches for Infantry	---
Turkish Guns	⦿
Egyptian Guns	⦿
Brook	—

of inhabitants. The open spaces, and the narrow alleys which lost themselves among dilapidated houses, were strewn with rags, stones and pieces of mud-brick Shutters and doors hung crazily open, or were entirely missing" He has called it : "a city of the dead", and reported that only half a dozen shops still remained open.¹⁰

Such frequent attacks made the dwellers eager to depart at the first sign of danger. Even during recent distant crises, such as the 1956 war between Egypt and Israel, some of the native families left for Makkah seeking refuge by being next to the House of God. Another factor which increased their fear was that the settlement is surrounded completely by tribes, some of whom would seize any opportunity to attack it during periods of unrest and disorder.

No real growth and expansion was reported during this period, which lasted up to the end of the Second World War, because of a number of factors, of which the following are the most important:-

1. The financial difficulties which faced the Government and the nation generally.

2. This state of affairs was intensified in the early 1930's by the world economic crises which were accompanied by a drop in the number of foreign pilgrims. The pilgrimage and its dues were the country's most stable source of income.

3. Even when oil was discovered in commercially exploitable quantities and its revenue began to expand, activities were restricted during the war time, mainly due to the shortage of shipping and pipelines.

4. By the end of the war, production had begun to rise rapidly,

6

but unfortunately this only benefited a minority, since it was translated into the construction of many large, expensive mansions outside the town wall. One ultimate advantage derived from the ruinous state of the As-Salamah and Karwah quarters : having been ruined and largely unoccupied since the First World War, as most houses belonged to the deported Ottoman Turks,* the sites could eventually be re-allocated for building only after 1942.

1945-1959

The case was different when the war ended, for then expansion began. The reasons which lay behind this were:-

1. The great attention given to the army which located its headquarters and training camps here.
2. The town's historical wall was pulled down (1947 AD), to allow expansion.
3. The Government-owned area bordering the wall from the east was distributed by the local authority among the inhabitants.
4. Finally, and above all, security of rule made living, even in a remote dwelling, increasingly stable.

The land given by the Government directed settlement growth in an easterly and south-easterly direction. By 1951, part of the expansion had reached Wadi Wijj, where it stopped. Compared with this, growth in other directions was more limited, mainly because land is privately owned and most of it has belonged to villages for a very long time, i.e., owners

* The solution for this situation is published in the Government official newspaper : Omm Al-kora, No 920, dated August 14th 1942

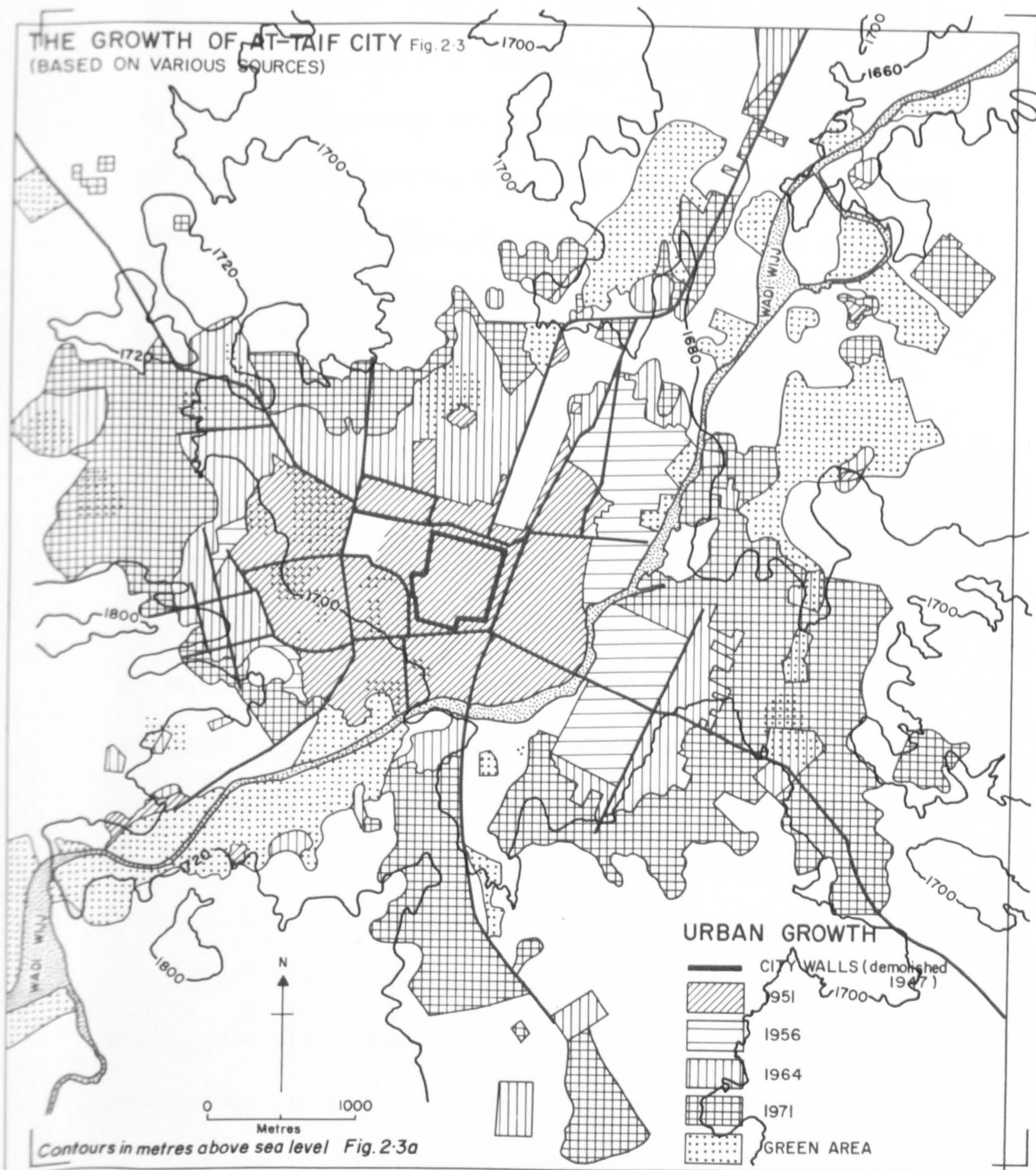
are, in effect, tied to their own land by tradition and custom. Several times, however, a situation arose in which the owner was asked to sell his land, and in the end he lacked the courage to refuse because of the buyer's position. This did produce some turnover of land. The western part of the settlement has seen another wave of mansion building : some of the mansions are almost palaces, inhabited in the summer time only. The rich concentrate here because of the attractive environment, the presence of water and of orchards.

In contrast, the east has come to be inhabited by people with a lower standard of living - the majority of whom are immigrants. The settlement morphology here differs greatly, as it consists mainly of single-storey poorer dwellings. There are, for instance, no open spaces and greenery, though they are available in the west. Accordingly, land values are not high in comparison with the western part. However, the 1951 map indicates that the urban area had reached a total of 2.5 sq km (250 hectares) (Fig 2.3).

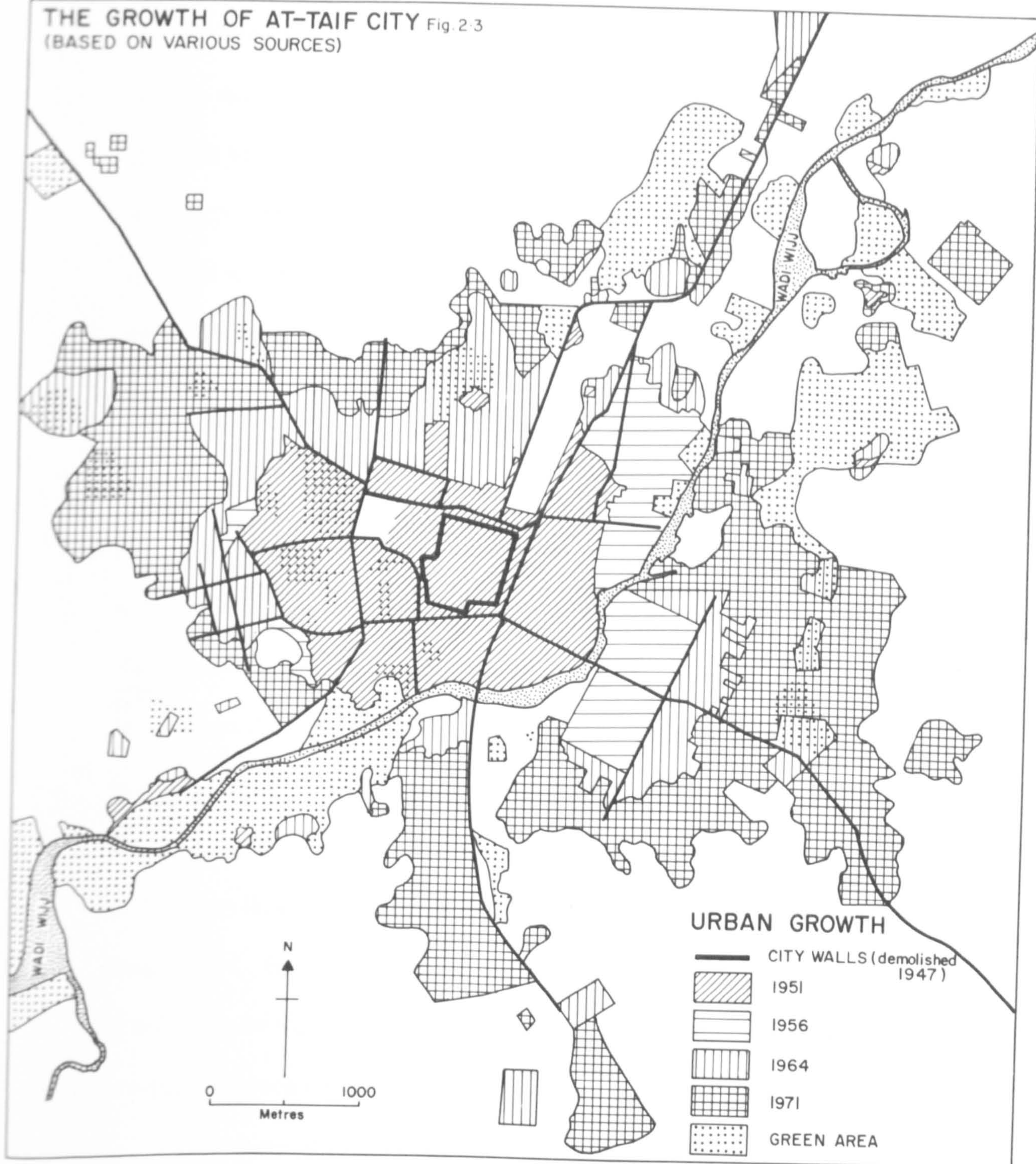
From 1945 onwards, more growth was to be expected as oil revenues increased constantly. In addition, this new wealth was more fairly distributed. All this has increased the value of business and trade, and has raised the standard of living, which in due course has attracted more people. Most of these were originally rural dwellers in At- Taif Amirate and elsewhere. Since they had originally a low standard of living, they have settled directly in the eastern parts of the settlement.

Hence, At-Taif expanded remarkably, but mainly in an easterly direction. Figure 2.3 shows the settlement growth in 1951 and 1956 : the increase in extent of the urban area in this five-year period was

THE GROWTH OF AT-TAIF CITY Fig. 2.3
(BASED ON VARIOUS SOURCES)



THE GROWTH OF AT-TAIF CITY Fig. 2-3
(BASED ON VARIOUS SOURCES)



1.4 sq km (140 hectares). It is interesting to note, however, that around 95% of this expansion occurred in an easterly direction. In 1945 At-Taif was relatively compact, within and beyond its walls, but growth between then and 1956 radically altered the urban morphology. There was only slight expansion in a narrow fringe in the west, but the greater ease of land purchase on the other side of the city concentrated expansion there, partly limited by the Wadi Wijj. By 1959, therefore, At-Taif was less compact and, although its core remained the functional centre, the centre of gravity of the built-up area had shifted away to the east.

1960-1973

Up to early 1960, the settlement increased considerably in size and became in addition more crowded, even in winter (previously At-Taif was deserted during this time). But, unfortunately, this growth is unplanned, even though by rights all should have permission from the municipality before starting construction or repair work. For example, no attention has been given at all to reserve spaces either for amenities or for services. Everything proceeded bilbarakah, i.e., by the blessing of God, and without paying much attention to prior investigation. Briefly, there was a noticeable growth, but beauty and evidence of modern planning are completely missing.

This state of affairs has put At-Taif behind the main neighbouring settlements : Makkah and Jeddah. This stirred the jealousy of At-Taif's leading people. Emotions have been roused by the remarkable activities of the newly-appointed head to the municipality of Makkah. The leading

people have simply arranged a week for "social services and beautification" in which the inhabitants will participate. The objects to be achieved included cleaning the settlement, planting trees, naming the streets, and filling up ditches and swamps. The proposed week, however, has been extended to several weeks. Unexpected support and co-operation at all levels have fulfilled all the requirements. All have resulted in the creation of a completely different appearance of the settlement, which, in due course, attracted further growth.

Establishing a special Undersecretariat for Municipal Affairs in 1962 and the annexation of the Town Planning Office to it, has strengthened the position of municipalities in the country. In other words, the municipality has become more actively effective due to improved techniques and increased allowances. Major projects are included in the budget of the Undersecretary. Others are financed by the municipality budget - projects section, which differs in size from one year to another, as indicated in Table 2.1 in round figures.

TABLE 2.1
Growth of At-Taif's Municipality Budget, Projects Section
during the Period 1965-66 and 1972-73

Year	£	Year	£
1965-66	600,000	1970-71	400,000
1966-67	800,000	1971-72	850,000
1967-68	500,000	1972-73	900,000
1968-69	400,000		
1969-70	300,000	TOTAL	4,750,000

Source : Undersecretariat for Municipal Affairs, Municipal Services (1965-1973), no 1, Year 1, Ar-Riyadh, 1973, p 70 (Arabic)

Out of the total, * some £1,800,000 was paid for property pulled down to enlarge streets, and around £2,700,000 was spent on street works which include asphalt covering, constructing pavements and introducing street lighting. The problem, however, of At-Taif as well as other cities in the country is not a financial one, but rather one of attitudes, entrepreneurship, and motivation.

There are other factors which, in addition to the expansion of municipality achievements, have attracted more people from inside the country as well as outside it. The city is linked with the cities of Makkah and Jeddah by asphalt roads, and later on with Ar-Riyadh by the Trans Arabia Highway. More recently, it has been connected with the fertile south-west by a southern highway. As a route centre for roads leading to Makkah, it becomes involved in pilgrim affairs : with the great increase of foreign pilgrims in recent years, Jeddah International Airport becomes over-crowded during peak hours - 42 flights during a single hour on January 5th 1973 - a situation which led to the idea that Al-Hawiyah airport (north-east of At-Taif city) should be utilised to relieve some of the pressure. It is also the site of the King Abdel-Aziz University's Faculty of Medicine, which is under construction; and further growth resulted from the signing, in November 1973, of a two-year contract of just under £7 millions towards building the summer offices of the Royal Cabinet, Council of Ministers and Minister's Offices. A Summer Resort Amelioration Committee, which is headed by HRH the deputy governor of the Amirate of Makkah district, makes recommendations

* The conversion rate for the £ sterling is taken at 10 riyals throughout the thesis

for planning and improvement.

By 1964, the urban area had reached 4.8 sq km (480 hectares) : an increase of only 0.9 sq km (90 hectares) since 1956. This shows a relative decline in growth when compared with 1951-56 rate.

What happened was that, when land values rose in the first half of the fifties, people purchased large plots, walled them up and left them unused. Later on, a suitable chance arrived to develop these plots. On the other hand, for example, there are other associated factors that have caused vacancies : the transfer of a number of departments of the Ministry of Defence and Aviation, and the Model School. Many property dealers and others have bought lands in the Al-Hada district (20km towards the north-west of At-Taif city), which has been newly linked by an asphalt road. Furthermore, the already inadequate water supply has meant a grim future for many.*

Expansion is not limited to the eastern and north-eastern parts of the city (Fig 2.3) because of the following two main factors:-

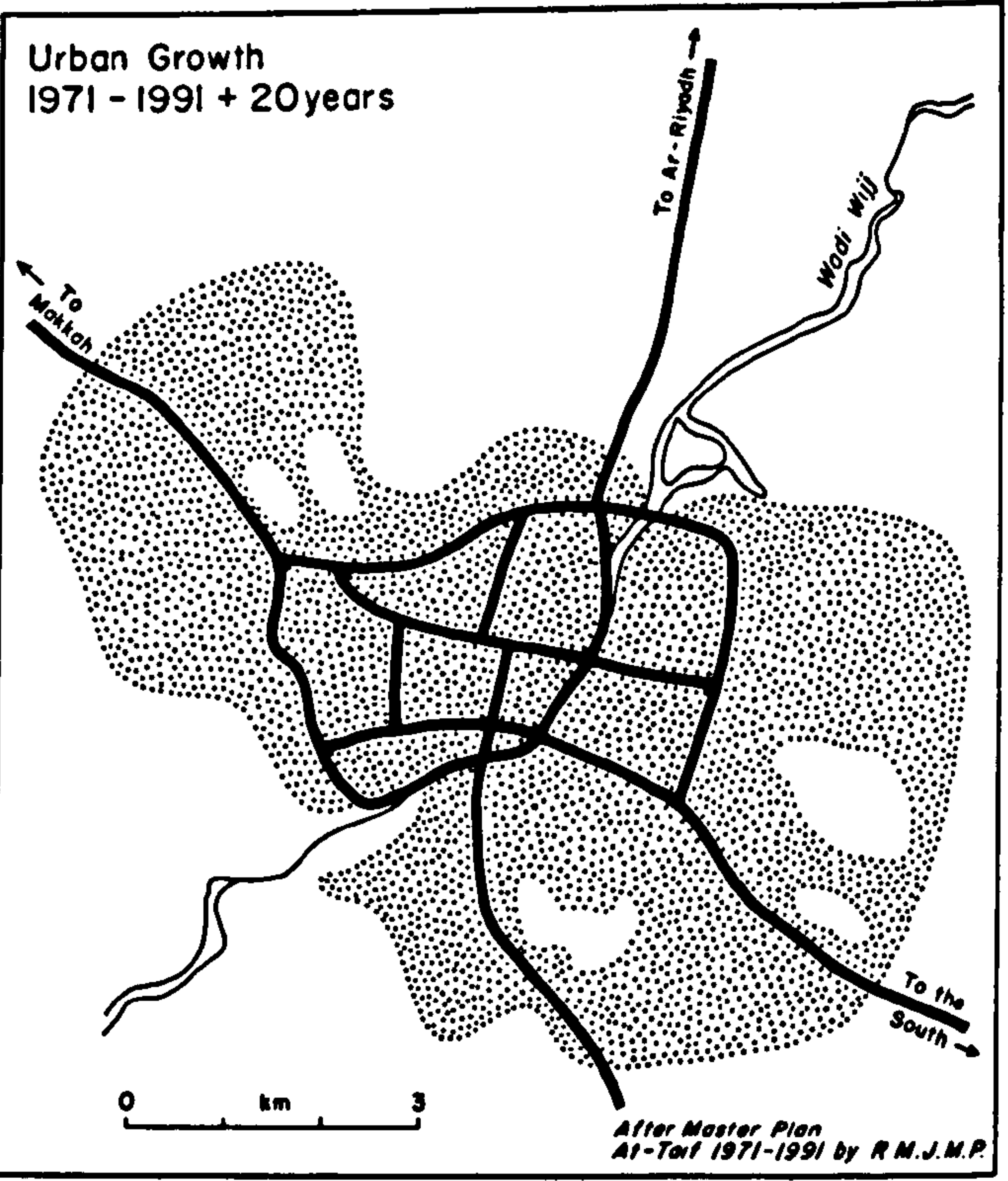
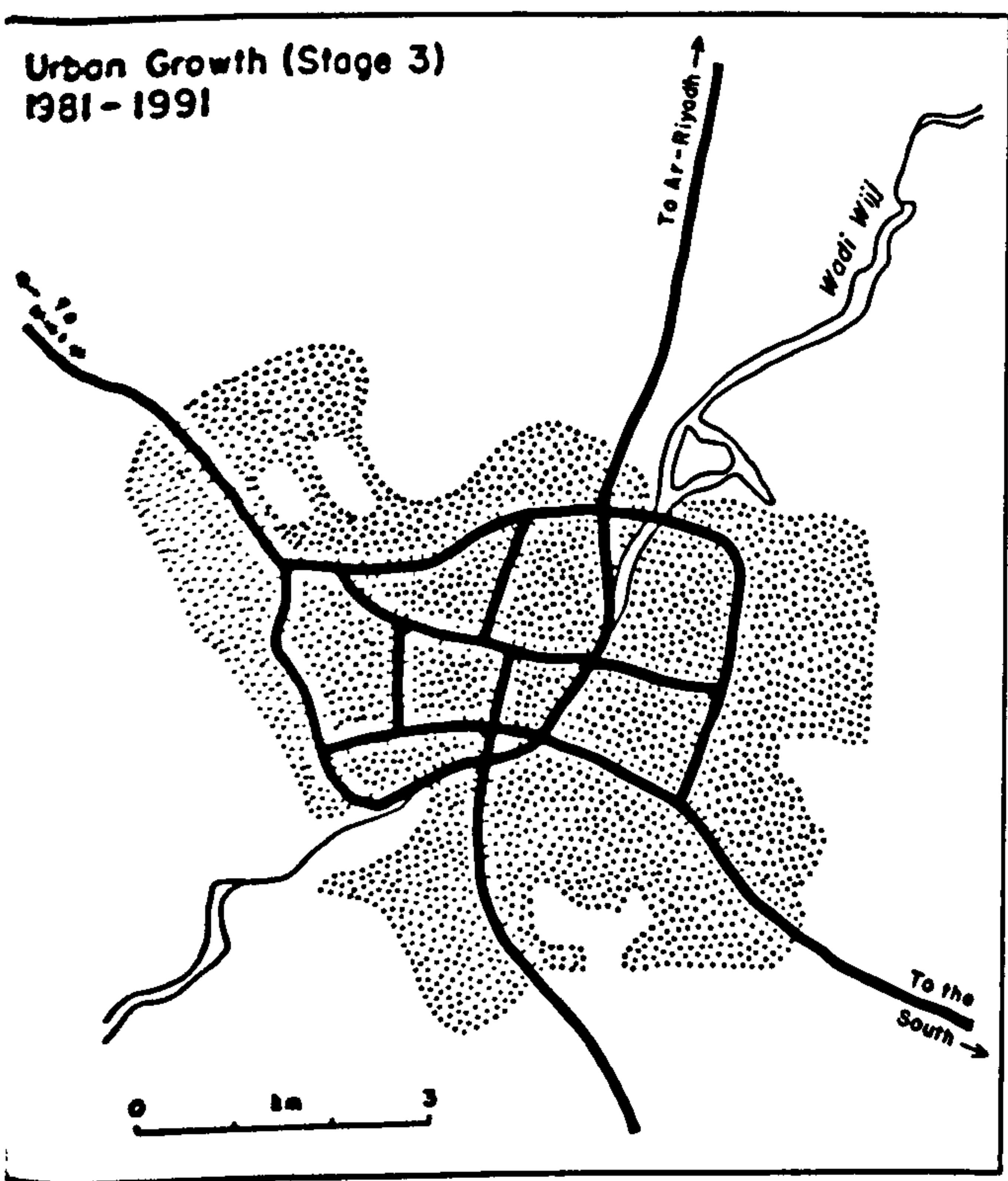
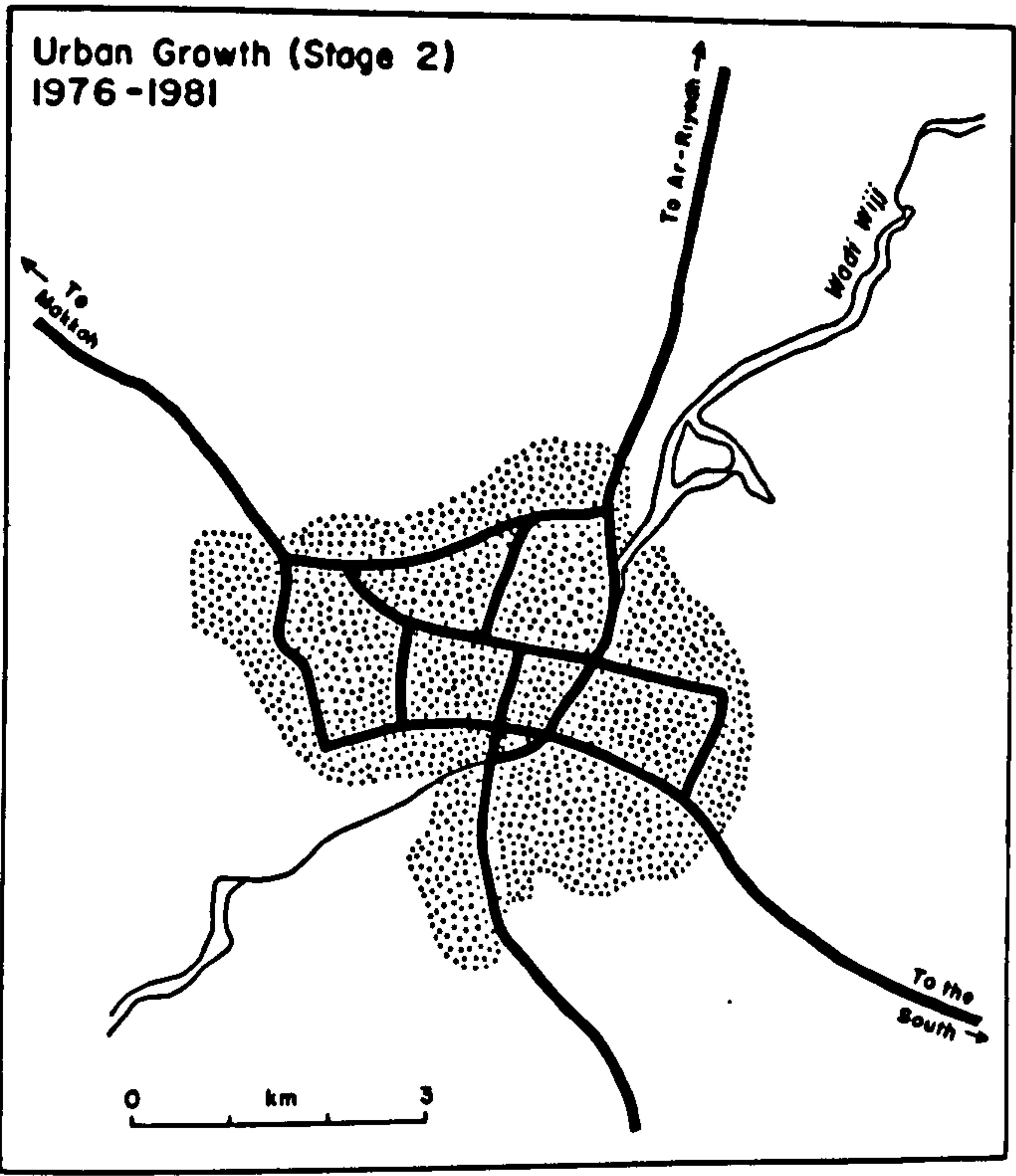
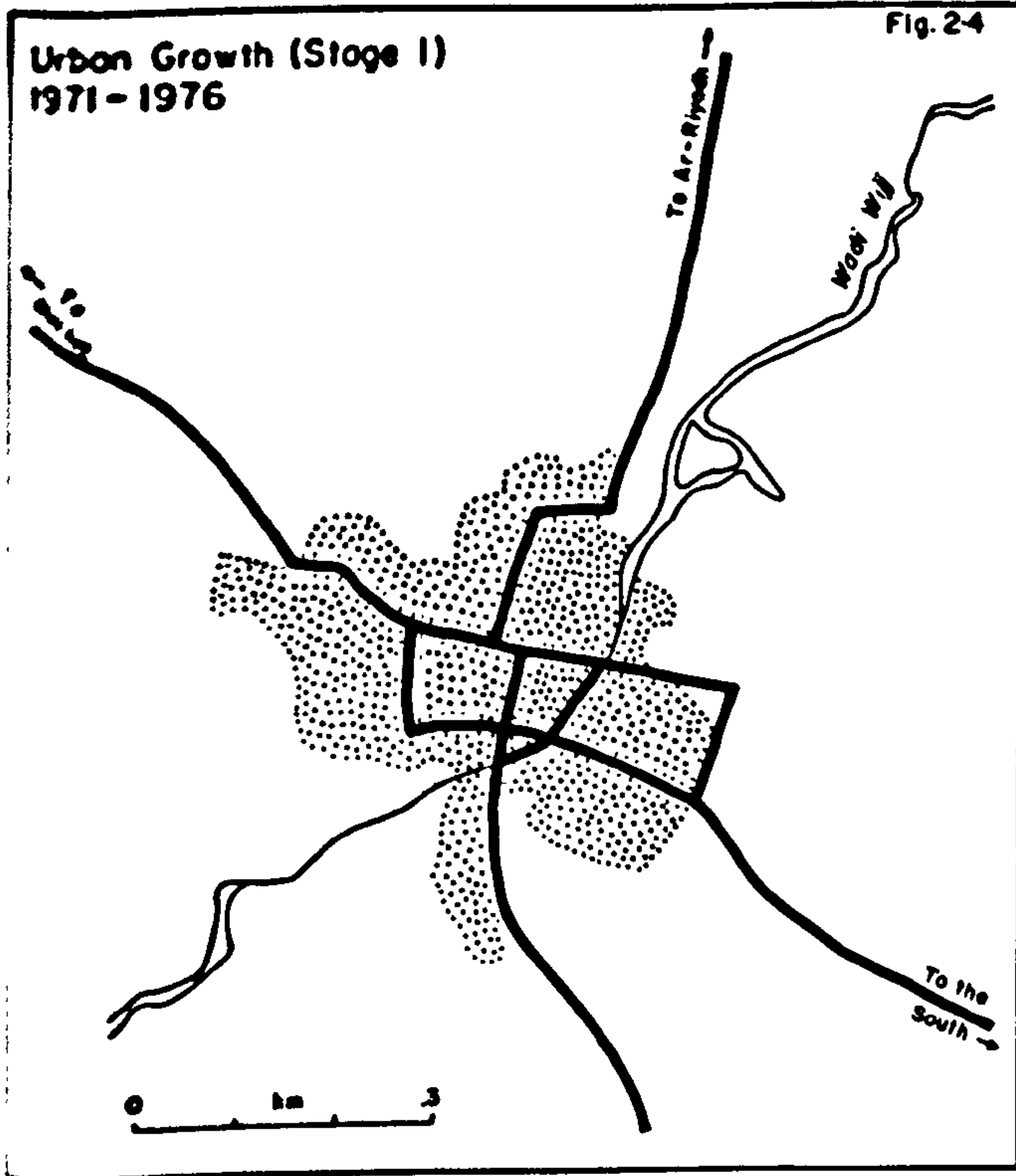
1. Large areas in Karwah and As-Salamah have been finally made available to the public when their owners became more approachable.
2. As the newly constructed Trans Arabia Highway was planned to pass Maashi, a building boom has occurred in this quarter.

The 1971 maps illustrate the expansion of the city since 1964. Growth has occurred in all directions and has engulfed far-away villages such as Ar-Rayyan, Kamlah, Al-Jal and Jabrah. As a result,

* Water supply is dealt with on pp 107-115 Chapter 2

the urban area has reached 9.7 sq km (970 hectares), an increase of 4.9 sq km (490 hectares) since 1964. Because of the hourly oil production increase, the budget has jumped from £311,200,000 in 1964-65 to £2,281,000,000 in 1973-74. The proclamation of the Crown Prince Faisal as King, in late 1964, certainly stimulated the growth, progress and prosperity of the country. As far as At-Taif is concerned, there are other factors which fit in with the country's general improvements. These factors, however, differ to some extent in their effect in place or time. First, much attention has been given to the city and particularly its western parts, as the new monarch spends the summer time here, while the former used to stay in Al-Hawiyah (21 km towards the north-east). This has stimulated developments in the city and consequently less to Al-Hawiyah. Second, many expensive dwellings have been constructed on areas near the Royal Palace, of which Al-Khalidiyah is a unique example as it is almost limited to high-class residents. Third, the dispute between the Governments of Saudi Arabia and Egypt over the Yemen inhibited the Saudi Arabians for many years from spending the summer in Egypt, a situation which has increased remarkably the number of summer visitors to At-Taif city and its neighbouring summer resorts. Fourth, whilst the purchase of Al-Mathnah water rights from its owners has unfortunately put an end to pre-Islamic orchards and vine yards, it then gave rise to fresh expansion towards the south-west and, indirectly, allowed growth in the whole settlement by increasing its water supply. Fifth, international firms, such as Robert Matthew, Johnson-Marshall and Partners of the United Kingdom and Sauti of Italy, are mounting improvement projects such

Fig. 2-4



expectation takes place in reality, a remarkable difference will be seen as the difference between 1951-71 and 1971-91 growth is so great, being respectively 2.5 to 9.7 and 9.7 to 22.5 sqkm. In addition to all previously mentioned factors concerning growth, it is of interest to draw attention to the fact that the city core streets and lanes were intended for pedestrian use only, so that they have not enlarged the built-up area. The second point is that mountains do not, at present, cause any real disturbance to the pattern of growth (Fig 2.3a : transparent overlay). Yet, when the settlement enlarges they will influence growth, especially in a western, south-western and southern direction. On the other hand, these mountains are of exceptional beauty, especially at Ar-Roddaf to the south of the city, and are worth protecting.

Quarters

The city of At-Taif has been divided into districts or quarters since the Ottoman era and possibly even earlier. The main idea behind this division is that it aids the local authority in governing the settlement. Even today, it is still the case. At the present, there are 16 quarters in the city of At-Taif. Nevertheless, this figure is flexible as, for example, two quarters may be joined together or separated into three. Boundaries between quarters are made by the local authority. They extend from either one side of a street to a party wall of two buildings (Plate 2.1). This state of affairs was confusing when, for instance, these two buildings were pulled down and made into one so that the quarter boundary was no longer visible. This has been the case of the Bin Moammar building in the Suq, since it belongs to both



Plate 2.1

"Boundaries between quarters extend from either one side of a street to a party wall of two buildings." Page 75

In the latter case, the building to the right belongs to Fooq quarter while the one to the left belongs to Asfal quarter.



Plate 2.2

"The mirkaz (bed like seat) in coffee houses acts as a seat in day time and bed at night." Page 96

King Saud Street, western side.

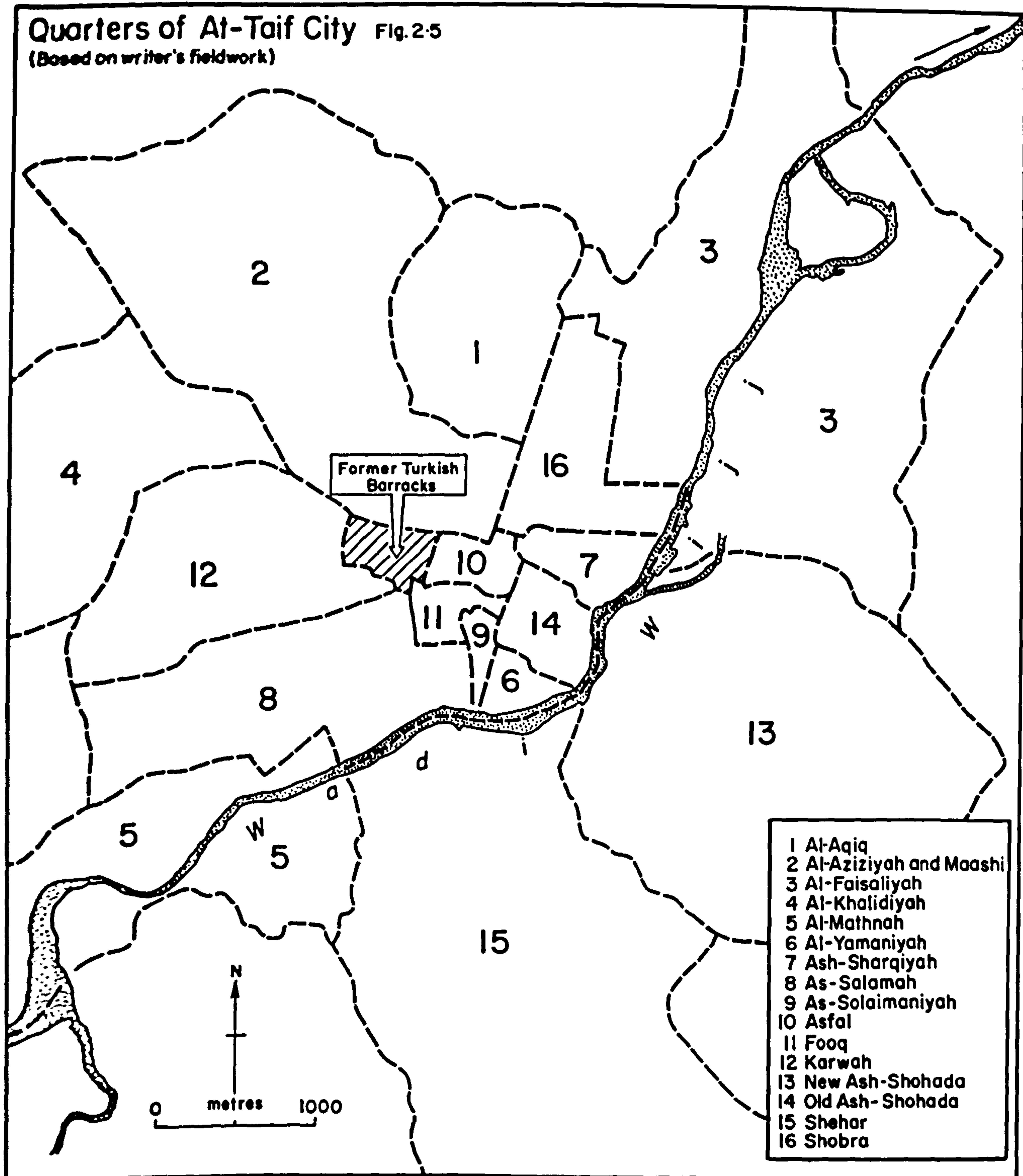
Asfal and Fooq quarters. Figure 2.5 shows the distribution of the city quarters. Some of them have subquarters, but this is not mentioned as long as it is not acknowledged by the local authority. These divisions, however, are used in this thesis for comparative purposes.

Amirate Centre

The city of At-Taif acts as a centre for its Amirate since it is the capital settlement and hence the seat of administration. It provides many services for its tributary area. During the summer months, the range of services becomes much broader as the city becomes the country's capital. During this period also, the Amirate of Makkah District (to which At-Taif Amirate belongs) shifts its command offices from the cities of Makkah and Jeddah to At-Taif.

Concentration of services and amenities in the urban area has, on the one hand, strengthened its overall superiority and, on the other, dominates its tributary rural area. For this reason, the tributary area has no other alternative than to depend upon the centre which provides all the facilities which are unavailable elsewhere. Rural-urban movement has been one of the many outcomes of the centralisation of activities and is dealt with in Chapter 3 and Chapter 5. In addition to being the headquarters of trades and institutions, the city is also a transport focus, as it is located at the confluence of routes. Improved quality of transport with the increasing density of settlements has helped much in this respect.

Quarters of At-Taif City Fig.2.5
(Based on writer's fieldwork)



Services

Among the many services the city offers, the following ones have been chosen for they are important, unique and differ in their area of influence. These selected services are : Government; education; health; hotels; and coffee houses.

A. Government

This service sector is very important to the city, as its livelihood depends greatly on these functions. There are, in the city, around 30 local and regional offices of Government ministries and departments of which selected ones are included in Table 2.2 and Figure 2.6. The area of influence of four selected offices is located on Figure 2.7 : a case which demonstrates clearly the complexity involved. It also creates clashes and difficulties concerning regional development. The Government services' share of the total services in the city reaches 38.7%. The six cities of Western Province (Makkah, Jeddah, Al-Madinah, At-Taif, Yonbu and Tabouk) have a figure of 27.8%.¹¹ This branch of the services is always remarkable in a country where routine is still observed, man (not machine) solves every matter; and it is the most desirable occupation for most.

B. Education

According to the Central Department of Statistics' official sample survey of April 1966, there were 70.1% (male) and 95.6% (female) illiterates among the country's native population. These figures become higher in rural areas and particularly among the country's nomadic population (15.2%), where education facilities are lacking. In contrast,

LOCATION OF SELECTED OFFICES OF GOVERNMENT MINISTRIES AND DEPARTMENTS IN AI-TAIF CITY (based on writer's fieldwork) Fig. 2.6

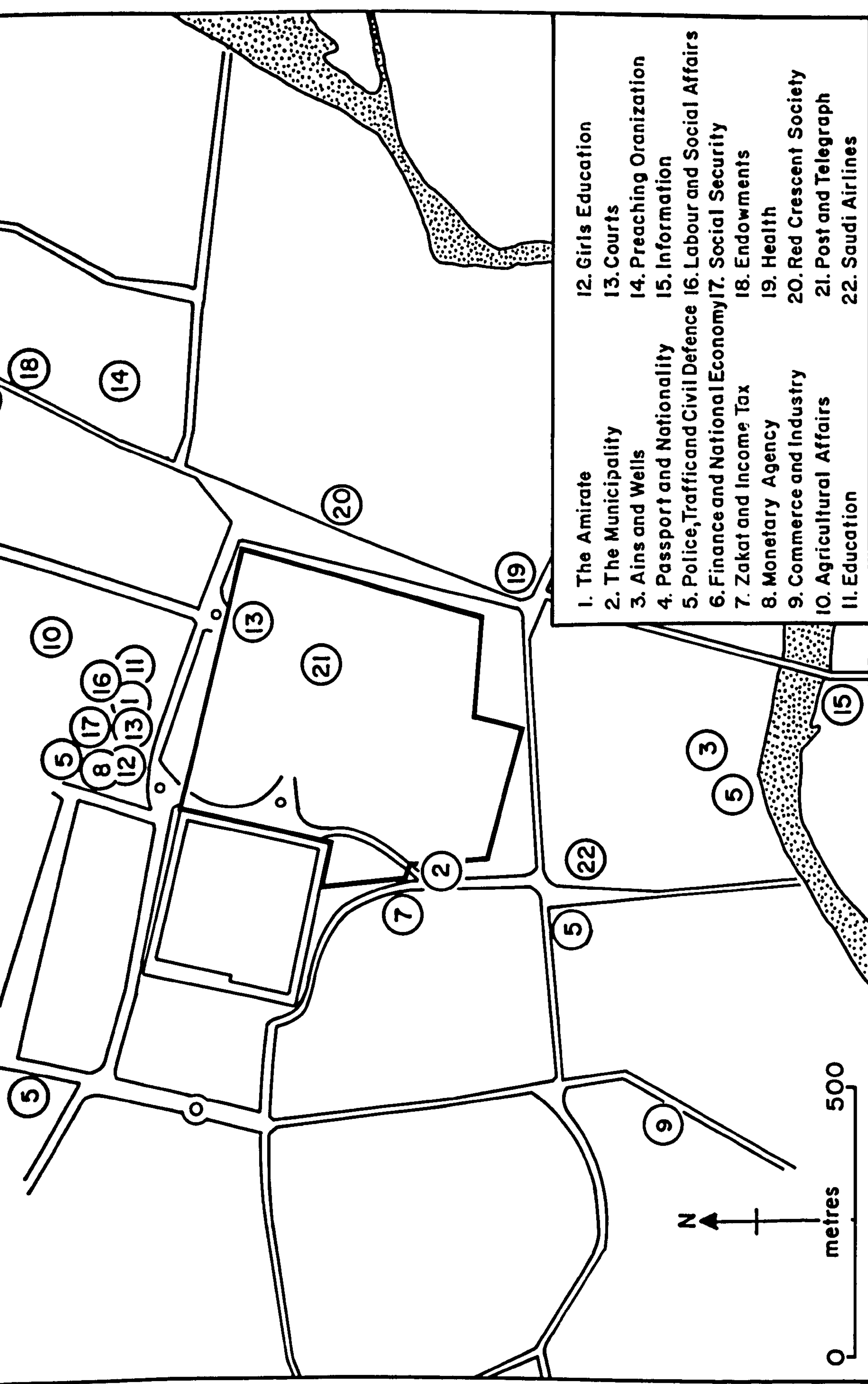
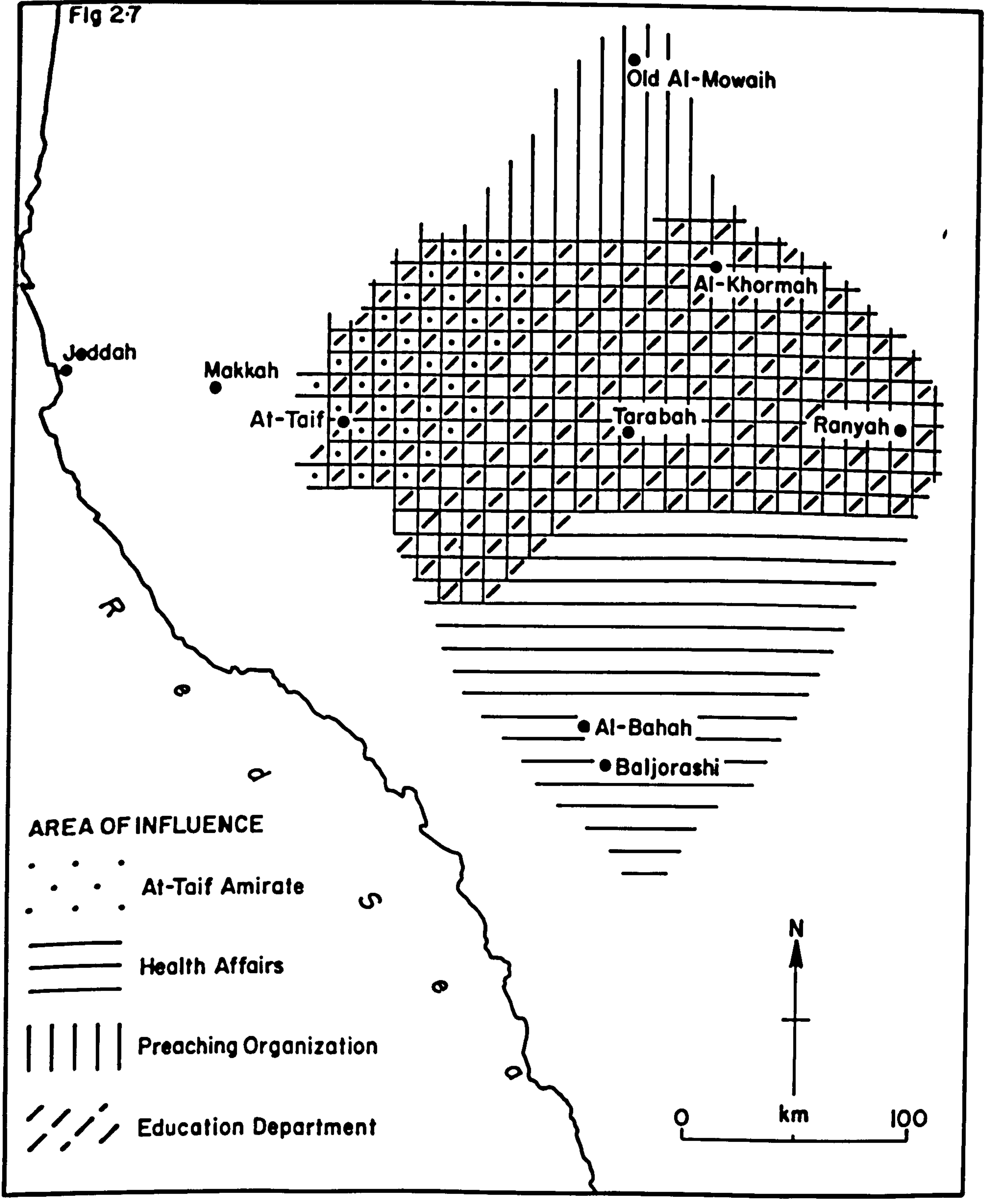


Fig 2-7



urban areas have a lower percentage of illiterates, as indicated in Table 2.3

TABLE 2.3
Percentage of Illiterates According to Sex
In the Cities of Makkah, Jeddah and Ar-Riyadh, 1966

City	Male	Female	Both Sexes
Makkah	45.64	80.02	61.26
Jeddah	48.94	72.86	57.99
Ar-Riyadh	39.09	82.98	56.69

Source : Central Department of Statistics, Ministry of Finance and National Economy

Availability of education facilities has also lowered the illiteracy rate in the city of At-Taif to 61.0%. Unfortunately, the Central Department of Statistics has no breakdown of the male and female percentage nor of the At-Taif rural area, but clearly the illiteracy rate must be higher for females, and in rural area. A comparison of the Western Province six cities (Makkah, Jeddah, Al-Madinah, At-Taif, Yonbu and Tabouk) with their rural areas shows a definite imbalance. For every place in primary schools in rural areas there are 2.5 places in urban areas. The percentage of places available is 2.1 in urban areas to 1.0 in rural areas, while the percentage of urban to rural population is not more than 1.6 to 1.0.¹²

To improve this situation, the Government has declared 'war' on wide-spread illiteracy. Education is to be provided free at all levels : nursery to university and beyond. Increasing wealth has

allowed the Government to increase education allowances. The Ministry of Education budget has grown from £11,459,600 in 1959-60 to £132,759,211 in 1973-74.* The Directorate General of Girls' Education budget has risen from £200,000 in 1959-60 to £48,527,215 in 1973-74.* Student enrolment figures also show similar increases. For instance, male pupils (Ministry of Education) from nursery to secondary level were 304,357 in 1968-69, compared with 422,281 in 1972-73. Female students (Directorate General of Girls' Education) for the same level were 104,664 in 1968-69, compared with 199,433 in 1972-73. The cause behind the low numbers of girls is that their official education only began in 1959-60, i.e., much later than male education. However, their growth rate is higher, as can be seen during the period from 1968-69 to 1972-73. Boys' numbers have increased by 117,924 and girls' by 94,769, although their schools are much less widespread.

In the city of At-Taif, education is mostly provided by the Government, as only a few schools are privately owned. All (state and private) are supervised by the Ministry of Education and the Directorate General of Girls' Education regional offices, whose influence extends far beyond the Amirate boundary. As indicated in Table 2.4, there were in 1970-71 19 elementary schools with 9,928 pupils, divided on average into 360 classes : giving for each class an average of 27 pupils. The number of teachers could be regarded as adequate, as there is one teacher for every 35 pupils. Eleven elementary schools occupy private dwellings which were not intended originally for educational purposes.

* Higher education allowances are not included.

TABLE 2.4

Male Schools Data (1970-71) for the City of At-Tall

No	Level	School	No of Classes	No of Teachers	No of Students	Playground	Sportsground	Owned/ Rented
1	Elementary	As-Saudiyyah	21	23	816	Yes	Yes	O
2		Ibn Khaldon	23	24	838	No	No	O
3		Al-Aziziyah	18	20	635	No	No	R
4		Sofyan	22	26	872	Yes	No	O
5		Ibn Al-Kasem	18	20	588	No	No	R
6		Al-Mogheerah	17	19	593	Yes	No	R
7		Ibn Al-Waleed	17	19	567	Yes	No	R
8		Addas	15	16	483	No	No	R
9		Ibn Nosair	28	31	1,012	Yes	Yes	O
10		Ibn Masoud	19	21	688	Yes	Yes	R
11		Ibn Keldah	25	27	588	Yes	Yes	O
12		Ibn Abbas	16	18	480	Yes	Yes	O
13		Al-Jahez	18	20	575	Yes	Yes	R
14		Ibn Kais	13	14	353	No	No	R
15		Al-Aqiq	16	18	627	Yes	Yes	O
16		Ibn Al-Haitham	19	21	654	Yes	No	R
17		Honain	7	8	191	Yes	Yes	R
18		Al-Mathnah	7	8	189	No	No	R
19		Al-Qaim (upper)	6	7	173	Yes	Yes	O
TOTAL			325	360	9,922			

TABLE 2.4 (Continued)

No	Level	School	No of Classes	No of Teachers	No of Students	Playground	Sportsground	Owned/ Rented
20	Intermediate*	At-Tawheed	23	34	665	Yes	Yes	0
21		Ibn Aktham	16	26	490	Yes	Yes	0
22		Ukaz	16	26	460	Yes	Yes	0
23		Al-Mothanna	19	30	580	Yes	Yes	0
24		Abo Mihjan	13	21	340	No	No	0
25		Al-Khamesah	13	21	405	Yes	Yes	0
		TOTAL	100	158	2,930			
26	Secondary*	Thakif	29	46	743	Yes	Yes	0
27		At-Tawheed	16	24	429	Yes	Yes	0
28		Al-Maahad	19	?	638	Yes	Yes	0
29		Al-Markaz	11	?	400	Yes	Yes	0
		TOTAL	75	?	2,210			

* Numbers of students are of 1969-70

Source : Education Department, City of At-Taif

Five schools lack playgrounds, and another ten lack sports grounds. Such buildings do present difficulties, as ventilation, light, space, conveniences and open grounds are not adequate.

Intermediate schools, however, except one, have play and sports grounds, and all are purpose-built dwellings. There were six schools in 1970-71 with 2,930 students, 100 classes and 158 teachers. Each class had an average number of 29 students, and there was a teacher for every 18 students.* There were in 1970-71, four secondary level schools. They were divided into 75 classes and accommodated 2,210 students, as each class had 28 students on average.*

In addition to the above schools, there are some ten Ministry of Defence and Aviation schools and some privately owned schools. Choosing the city as a place for the Faculty of Medicine of King Abdel-Aziz University, which is under construction, will bring higher education to the Amirate - a feature that will definitely add an additional pull-factor to the city.

Even after all this expansion of schools, there is still great pressure caused by the remarkable increase in education seekers. Nowadays, almost everybody wants to complete his education to fulfil a single goal : office work in the Government departments. The education policy was partly responsible, as vocational education is not as widespread as it ought to be, not only in rural areas, but in urban areas too. Nowadays, noticeable attention is given to this sort of education through different ways, such as raising its standard and

* The numbers of students refer to 1969-70

assuring the future of its certificate holders. The Ministry of Education has allocated in its 1973-74 budget a vocational school of secondary level in the city, which is considered the first of its kind in the Amirate. In the future, education is expected to improve and produce the desired effect, as the Higher Educational Committee contains selected top men, headed by HRH the Second Deputy Premier.

Girls' education is the responsibility of the Directorate General of Girls' Education, which was established in 1959-60. Since then, remarkable progress has been recorded in spite of the difficulties it faced in some parts of the country. The area coverage of the regional office, which has its headquarters in the city, is dissimilar to that of boys' education for it is much bigger. Complete independence between the two offices has somewhat limited the difficulties caused by their different areas of authority.

In the city of At-Taif, there is a single, privately owned nursery school with 237 children in 1970-71. This type of education has not yet had great success, as the majority of mothers are not employed. As a result, a remarkable number of children at this school have foreign mothers, who are engaged in nursing and teaching, for example.*

There were (Table 2.5) 12 elementary schools in the city, with a total number of 6,732 girls. These had 171 classes and 241 teachers, and there is a teacher for every 28 pupils. Shortage of classes has made them crowded and there were, on average, 39 pupils to each class. There are only two of the twelve school buildings designed for

* In 1971-72, only 0.8% (male) and 1.4% (female) of the country all education levels are in nursery schools.

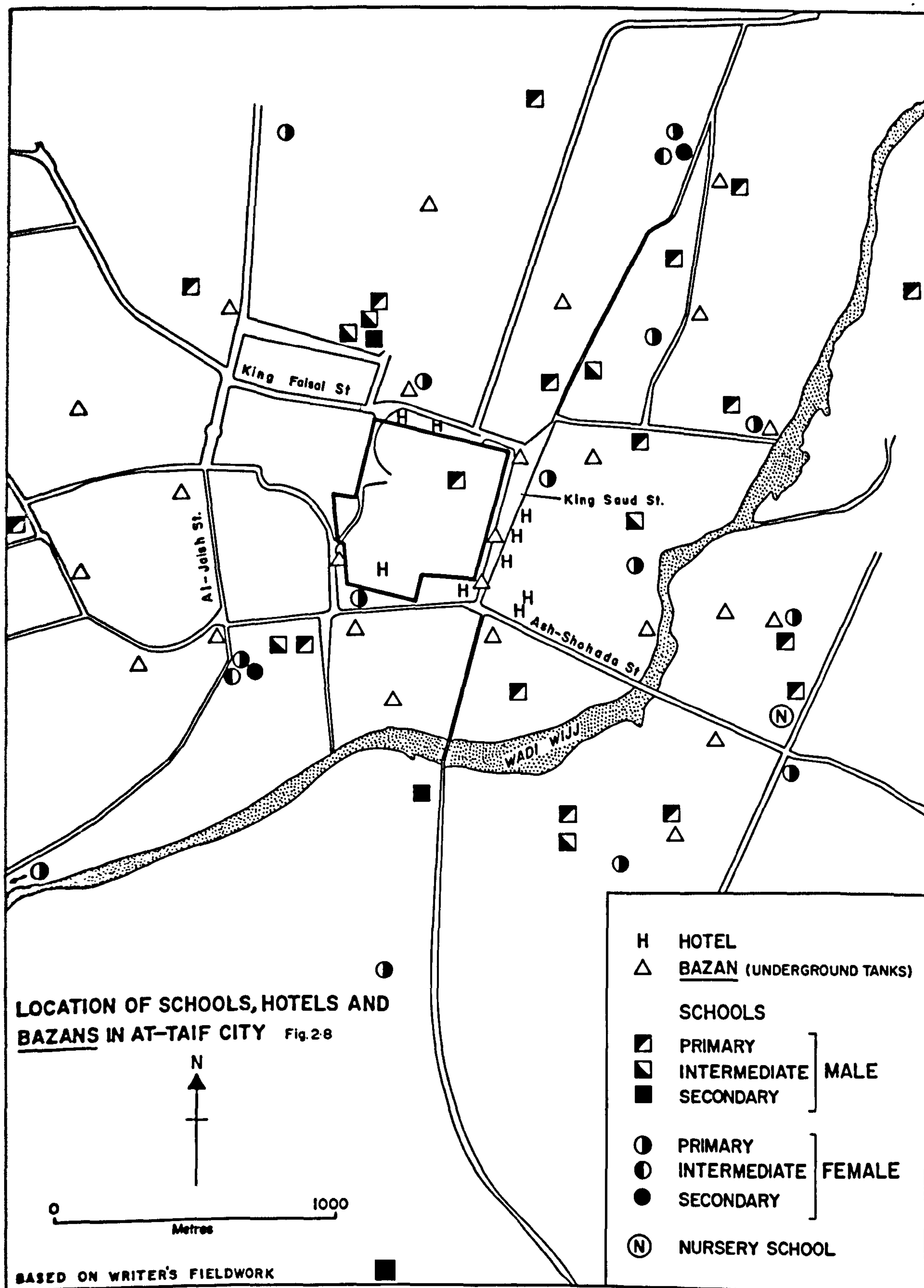
TABLE 2.5

Female Schools Data for the City of At-Tali (1970-71)

No	Level	School	No of Students	No of Classes	No of Rooms	No of Teachers	Staff (Management)	Conveniences	Owned/ Rented
1A	Nursery (private)	Al-Hadanah	237	4	?	8	?	?	R
1		First	490	12	18	16	4	6	R
2		Second	861	20	27	30	3	31	O
3		Third	876	19	28	25	5	31	O
4		Fourth	669	17	26	23	5	10	R
5		Fifth	658	16	27	24	2	21	R
6		Sixth	300	9	11	11	4	4	R
7		Seventh	649	17	20	26	5	21	R
8		Eighth	468	14	24	21	4	21	R
9		Ninth	559	14	17	19	4	8	R
10		Tenth	252	9	17	12	2	5	R
11		Eleventh	578	13	21	16	4	13	R
12		Twelfth	372	11	21	18	2	6	R
	TOTAL		6,732	171	257	241	44	177	
13	Intermediate	First	570	16	20	28	4	22	R*
14		Al-Maahad	355	10	?	23	6	?	O**
	TOTAL		925	26	?	51	10	?	
15	Secondary	Al-Maahad	21	1	?	?	?	?	O***

* With Ninth Elementary; ** With Third Elementary; *** With Third Elementary and Intermediate Al-Maahad

Source : Directorate General of Girls' Education, General Statistical Bulletin of Girls' Education (Government and Private), 1970-71 (Arabic)



C. Health

Like education, the Government is offering free health services through many bodies, of which the Health Ministry is the main one.* To enhance the country's health renaissance, the Ministry budget has risen from £5,526,300 in 1959-60, to £58,281,807 in 1973-74, but the manpower constraint in this service is more important than the financial one, as finance is abundantly available. For this reason, the country's second and third Faculties of Medicine are under preparation now. There are also three health institutes which provide para-medical staff, in addition to the 307 students (1971-72) studying medicine and public health abroad. These activities, along with many others, are gradually improving health and reducing morbidity and mortality, which are - according to the Central Planning Organisation - at an intermediate stage of development. "A time will come when every citizen will enjoy a healthier and happier life, far above the present stage." **

In the city, health conditions are believed to be satisfactory. The main cause of ill-health here and almost everywhere in Saudi Arabia is the level of nutrition. It is - generally speaking - either inadequate for the majority, or unbalanced for the better off. In other words, "Saudi Arabia's present average per capita intake of calories is probably still inadequate by F A O standards (2,225 calories as a minimum

* Others are : Red Crescent Society, Ministry of Education, Directorate General of Girls' Education, Ministry of Defence and Aviation, and Ministry of Interior

** Dr Fakih, S, Director General of Health Affairs, Jeddah Region, quoted from Sparrow, J, Modern Saudi Arabia, London, 1970, p78

daily requirement)".¹³ The bulk of the population has a monotonous daily diet. The main dish is rice and meat, i.e., the variety of food stuffs (that is based on the basis of body requirement) seen, for instance, on most English tables is absent here. The best way to alter such situations, however, is to inform people - in an attractive and effective way - of the fundamental principles of nourishment. This way, although it is more effective in the long run, needs - naturally - knowledge, patience and continued effort as the family diet is rooted in tradition.

As regards facilities, the city is considered one of the best in the country. This is mainly due to the fact that many of these facilities are designed to serve not only the region but also the country as a whole. The reason for this clustering of superior facilities is namely because At-Taif has a pleasant climate. Unfortunately, however, there are disadvantages. Though the increased number of beds is far beyond any other city in the country, it does show, on initial examination, that there is no need for any more beds. The actual situation is, however, that out of the total number of beds, 1,314 are in the Psychiatric, and an additional 800 in the Tuberculosis hospitals, which are for the entire national use. The only benefit to the city - as far as health is concerned - is that they are near at hand. Table 2.6 shows the hospital facilities in 1971.*

King Faisal Hospital has become the sole health centre to provide general services, but it is constantly overcrowded. The figures in

* There is also Prince Mansoor Hospital with 165 beds in 1967, but I have omitted it since it does not belong to the Health Ministry, and particularly because of its limited scale of service

TABLE 2.6
Hospital Facilities in At-Taif City, 1971

Hospital	Speciality	Doctors	Nurses	Others	Beds
King Faisal	General	53	58	101	425
Shehar	Psychiatric	14	45	47	1,314
As-Sadad	Tuberculosis	18	34	31	800
Al-Hadhanah *	Child care	?	?	?	20

Source : Health Affairs, At-Taif city

* Opened around the middle of June 1973

Table 2.7 (below) show clearly the actual case during three years.

Noticeable increases in the 'floating' population take place in the summer months and particularly Gomad the second. During these months, the city's total population reaches 139,000 - an increase of 33,000 summer visitors (according to Robert Matthew, Johnson-Marshall and Partners, Socio-economic Survey of Western Province, 1971). On the other hand, Ramadan (the fasting month) shows the lowest figures in the three years - clear evidence of the effect of food on health standards which I have mentioned previously. During this month, all the population (except children and ill people) stops eating and drinking for about 12 hours every day. As a result, food is generally varied throughout this month. This can be seen in the data (collected in July 1971) concerning the city's daily consumption of meat (Table 2.8). These show clearly that there is a considerable increase during the month of Ramadan, in comparison with the rest of the year, and even with the summer months when the population increases. This means that every citizen is getting more protein. In figures, the average daily number of slaughtered animals during Ramadan (466) exceeded the daily average of winter months by 113 animals, and the summer months' daily average by 46 animals.*

To ease the burden placed on the King Faisal Hospital, the Ministry has opened two dispensaries with two doctors and two nurses at each to provide basic services. Ash-Shohada Dispensary has recorded 49,497 patients from 4th August 1970 to 23rd July 1971, and Ash-Sharqiyah Dispensary has recorded 50,427 patients during the same

* Differences in the sort of meat among city meat markets are dealt with on pp164-5 Chapter 4

TABLE 2.7
Number of Out- and In-Patients at King Faisal Hospital in At-Taif City

Year	No of Out-Patients TOTAL	Highest Month (Gomad the Second)	Lowest Month (Ramadan)	No of In - Patients TOTAL
1389 AH (1969 -70)	480,378	56,487	28,411	10,165
1390 AH (1970-71)	474,733	57,122	21,769	10,918
1391 AH (1971-72)	497,113	59,788	27,913	12,247

Source : Files of Health Affairs, At-Taif city

TABLE 2.8

Animals Slaughtered Daily in the City of At-Taif Meat Markets (1971)

Meat Market	No of Butchers	Sheep			Goats			Beef			Camels		
		Summer	Winter	Ramadan	Summer	Winter	Ramadan	Summer	Winter	Ramadan	Summer	Winter	Ramadan
1. Bab Ar-Ri	20	167	130	160	88	68	88	3	5	9	6	7	9
2. Ash-Shohada	16	35	25	35	15	12	15	7	10	14	1	1	1
3. Ash-Sharqiyah	15	24	16	24	14	12	14	3	6	6	3	4	2
4. Al-Bukhariyah	4	15	15	20	7	7	13	0	0	0	0	0	0
5. As-Saghah	1	3	3	5	2	2	4	0	0	0	0	0	0
6. As-Sadad Street	4	11	9	15	5	4	9	1	4	4	0	0	0
7. Super Markets	4	7	9	12	3	4	7	0	0	0	0	0	0
TOTAL	64	262	207	271	134	109	150	14	25	33	10	12	12

Source : Field Work, July 1971

period.

I believe that a large proportion of this high number of patients are not ill in reality. Women go there to pass time and men to escape work. However, this high number of patients in comparison with the limited number of doctors has created one main problem : inadequate service. Each doctor has a large crowd outside his room (no queue) which he has not enough time to examine, and to make matters worse, there is no record of patient case-histories, and no family doctor. This results in a large number of private clinics being run by doctors outside their normal hours. (Government work hours are from 0800hrs to 1400hrs approximately.) In short, this service has become in reality a sort of commercial enterprise with guaranteed profits. A parallel increase in the number and size of drug stores has also taken place, since hospitals provide free medicine. A situation was reached where each doctor's prescription could only be exchanged at a particular drug store. In August 1971, there were in the city of At-Taif 78 private clinics, 24 retail drug stores and four wholesale drug houses.*

On the 12th of April 1972, the Council of Ministers approved the steps taken by a committee of four ministers concerning the situation.** These steps can be summarised as follows:-

1. Each doctor working for the Government had no right to run a clinic.

* I have carried out, during this time, an investigation concerning the distribution of these clinics and its aspect, but since the case has been changed, I have omitted its results later on

** Council of Ministers, Order No 175, dated 12th April 1972

2. Those who had clinics had to close them down in ten months' time if they still wished to work for the Government. Otherwise, they were allowed to obtain a release and work privately.

3. The daily working time was to be increased by three hours.

4. A salary increase of 50 and 80 per cent (40 - 60 for non-Saudis) was granted.

5. Each private clinic had to be checked thoroughly with respect to its facilities and the qualifications of its staff.

The responses of doctors have differed. Some preferred to keep up their work for the Government, whilst others have withdrawn. This is based, however, on personal impression. However, the different response (personal wish for special work), salary and increase in working hours, in addition to supervision over private clinics should improve both the medical service of the Government and the private sector. The salary increase has given, for instance, the new graduate a monthly wage of £300 - which is supposed to attract more young practitioners. The para-medical staff have also received a considerable wage increase through overtime work.

D. Hotels and Coffee Houses

Though it is a resort, the city hotel business is not an important one. This is because of the type of its visitors* - most are native families. They prefer to stay in a rented dwelling for the required period. If their stay is for the weekend or so, then nothing better - from the social and traditional point of view - than to join relatives or

* The city's 'floating' population is dealt with in Chapter 3

close friends. Another point is that some of the city's visitors - especially those from Makkah* - own their dwellings. Accordingly, those who used to stay in hotels fell into two groups.

1. Foreigners working for the Government or private companies who came to the city for a matter of days, and also foreign teachers before finding a dwelling.

2. Officials of Government ministries and departments who came for a short official visit. Being on their own, paid in addition to lack of relatives has directed them to hotels.

Both groups come mainly during the summer - late summer for teachers - when the city acts as the country's capital. For these reasons, it is not surprising to note high charges** during this active period in contrast to the low number of callers during the rest of the year.

However, there are in the city (September 1971) a total of ten hotels with some 230 beds. The best, the Summer Palace, has now closed down for economic reasons. Of the remaining nine, seven are close to each other in and around King Saud Street, and two others are around King Faisal Street (Fig 2.8). Official foreign guests are accommodated in the Government-owned Guest Palace. Chiefs of tribes and leading tribesmen are accommodated by the Government in a specially provided building. Their visit depends on the presence of the

* Historical sources indicate that Makkans had property here even before the rise of Islam. Al-Jasir, H, The country of At-Taif and its historians, Al-Arab Magazine of Ar-Riyadh, vol 2, no 1, p 8, October 1967 (Arabic)

** These high prices, in comparison with other cities in the country, are considered moderate due to the lack of the expensive air-conditioning

King and the Crown Prince in At-Taif, as they are either ahl hajat, or ahl sharhat, i.e., in need of something, or accustomed to receiving royal bounty.

In addition to all these unfavourable conditions for hotels, coffee houses in a way are their principal competitors. The mirkaz (bed like seat) in coffee houses acts as a seat in day time and bed at night (Plate 2.2). The authorised coffee house has a store of beds, pillows and blankets which can be rented - usually - for £0.10 over-night, or for half price if a person brings his own bedding (a night at the cheapest hotel costs around £1). This service is restricted, naturally, to men, of whom the great majority are workers. It is only the outside urban area coffee houses that are regarded as suitable for every one to sleep in. The Suq area coffee houses, however, offer by order no sleeping service for moral and security reasons. Anyway, since coffee houses also act as a means of amenity, they are dealt with from this particular point of view later on. Business peaks - like hotels - are in summer and on Friday nights (weekend) in particular. Table 2.9 shows this clearly and other information collected in September 1971 during the fieldwork.

Amenities

Though a settlement of 106,000 inhabitants and 33,000 summer visitors (according to Robert Matthew, Johnson-Marshall and Partners, Socio-economic Survey of Western Province, 1971), At-Taif unfortunately has insufficient amenities. In fact, all the country's settlements lack amenities in varying degrees. Two major points have contributed

TABLE 2.9

Data on Coffee Houses located within the Core of At-Taif City.

(September 1971)

No	No of <u>mirkaz</u> (bed like seat)				No of Chairs	No of Sleepers (per night)	
	Summer	Year's Rest	Open Air	Covered		Summer	Year's Rest
1	50	50	25	25	200	12	8
2	60	60	30	30		10	5
3	40	40	20	20		10	4
4	55	30	27	27		8	4
5	80	80	60	20		20	10
6	80	40	50	30		20	10
7	80	40	40	40		25	6
8							None
9	15	15		15	12		None
10	40	40	20	20		10	5
11	13	13					None
12	80	40	40	40		2	1
13	80	80	40	40		6	3
14	80	80	40	40		12	2
15	18	18		18			None
16	8	8			24		None
17	2	2					None
18	10	10					None
19	6	6					None
20							None
21							None
22	12	12	2	10		2	2
23	8	8			50		None
24	10	10					None
25	45	45	15	30		8	6
26	50	50	15	35		15	8
27							None
28	25	25				5	4
29	100	100	50	50		15	10
30	70	70	30	40		40	30
31	60	60	20	40		25	20
Total	1,177	1,032	524	570	320	245	138

Source : Field work, September 1971

to this state of affairs:-

1. Less attention from the Government bodies accompanied by absence of maintenance.

2. Complete reliance on the Government by all people, who also lack the feeling of civic pride.

For this reason, it is not surprising to say that amenity works (as well as other works) do not last for long. However, this situation is not expected to last as long as education continues to spread, and the standard of living rises. As far as the Government is concerned, more attention is being directed to this problem now, for example by employing Sauti, the consulting firm for urban improvements.

But At-Taif, unlike many other cities of the country, has got a substitute to replace such lack of amenities - though it lies outside it. This is the surrounding countryside. This natural beauty, accompanied by a cool climate, not only attracts summer visitors, but also its permanent population. However, coffee houses, squares and open spaces, gardens and parks, and mosques are considered the main amenities in the city of At-Taif, as indicated below.

A. Coffee Houses

As mentioned earlier, cafes or, perhaps better, coffee houses are a type of amenity. In reality, they are the most important one, not only in the study area, but also in the country as a whole. In the absence of other means of amusement, the coffee house is of paramount importance, and so there is a daily home-coffee house movement for a large number of people. As seen in Table 2.9, there were 31 coffee houses

in the city core alone. More are seen elsewhere and particularly at Ash-Shohada Street, where I counted in September 1971 17 coffee houses with some 1,450 mirkaz (bed like seat). As each mirkaz takes up to three persons comfortably, Ash-Shohada Street coffee houses could have a maximum of approximately 4,350 customers.

Many coffee houses provide meals in addition to sleeping accommodation, but their main purpose is to serve tea (coffee is uncommon), soft drinks and the hookah. Above all they provide a place for meeting friends, having a chat or at least seeking relaxation. Once more, it is only the outside urban area coffee houses that are regarded as suitable for everybody.* To alter the situation, two modern coffee houses have been established. The biggest, Najmah by name, is on the wide island dividing King Saud Street, while the other one is on Al-kozaz Square's roundabout. Both plots are owned and rented by the municipality. They differ from traditional coffee houses by having ordinary chairs (no mirkaz), lawns, and beds of flowers (Plate 2.3). Najmah also has an annexed children's playground. Another point is that these two modern coffee houses charge, naturally, more than traditional ones, and so a better standard of customer is seen.

B. Squares and Open Spaces

These places, though they are limited, differ in their availability from one quarter to another. For instance, the city core has its traditional barbah, i.e., square (Plate 2.4). Although small, it is con-

* Here, even families can enjoy sitting on several mirkaz some distance apart from others



Plate 2.3

"They differ from traditional coffee houses by having ordinary chairs (no mirkaz), lawns, and beds of flowers." Page 99

Najmah modern coffee house, King Saud Street.



Plate 2.4

"The city core has its traditional barhah, i.e., square."

Page 99 Asfal quarter near Al-Khamees Lane.

sidered the main playground for the children of the surrounding dwellings, as there are no children's playgrounds in the city.* Western, northern and southern quarters have, in contrast, many open spaces which are mainly pieces of land that have not yet been developed, or agricultural lands. It is only the packed and built-up eastern quarters that have fewer open spaces. However, since all these open spaces are privately owned, the day will foreseeably come when all quarters will be equally lacking in such amenities. The only thing that could stop this would be to buy selected plots - by the Undersecretariat for Municipal Affairs - prepare and reserve them for public needs. This matter needs speedy consideration, since these lands are rapidly disappearing. Hawaya and Shobra were among the last to be sold (Plate 2.5). If this does not take place, it is only the new, planned areas which will have open spaces among their built-up areas.

C. Gardens and Parks

It is not only the shortage of water (as most of At-Taif people believe) that makes the city completely lack this amenity. In short, the body responsible, the municipality, has done little towards creating a public park. For the municipality such a project would be difficult to undertake, for it is not absolutely a matter of land, water, trees and bushes. It is also a question of how to protect it from man and animal. To fence it is sufficient against the city goats and sheep population.**

* When, in early 1970, Ar-Riyadh Municipality fixed swings, etc., for children's use, they lasted for only a few weeks, as the adults used them.

** There were 10,960 goats and sheep in the city in November to December 1967. This matter is dealt with in Chapter 3



Plate 2.5

"Open lands are rapidly disappearing, Hawaya and Shobra were among the last to be sold." Page 100

Planned plots for sale in Hawaya sub-quarter, 1969, December.

But it was insufficient against man, and so barbed wire was added to iron fences to protect flowers such as in Al-Haraj square's roundabout (Plate 2.6). As a result, each young tree planted on pavements needs an iron or wood cage and wire netting.

Other greenery is privately owned. Mansions and palaces which are concentrated in western quarters have their own gardens. In addition to being private, they are encircled by high walls. The benefit to the public, however, is the fragrance of their gardens. There are also very few remaining orchards that once were found inside the city limits. These orchards, in addition to those just outside the city, act during summer periods as an attractive rendezvous for ladies. Week days are divided among these orchards. It costs £0.10 per head to enter the orchard, where singing and dancing is allowed. At the beginning of each summer, the Preaching Organisation takes a written guarantee from orchard owners that they will keep everything under close supervision.

D. Mosques

Mosques, generally speaking, are simple in their architecture and furnishing, but these two points have no significance as far as the faith is concerned. It is the responsibility of the Ministry of Pilgrimage and Endowments to maintain mosques. There are also many people who build, maintain, furnish and spend money on mosques, for - "whosoever has built a mosque for God, God has built him a house in Heaven".¹⁴ Another point is that mosques are quite full of people praying and contemplatives - a city without earthly enticement - during the daily



Plate 2.6

"Barbed wire was added to iron fences to protect flowers such as in Al-Haraj square's roundabout."
Page 101



Plate 2.7

"Additional damage is caused by rain." Page 104
King Saud Street, western side.

five prayers, as prayer in groups is 25 times better than praying alone.¹⁵
 Strict rules have helped, as shops must close during prayer times.*

There are in the city and its immediate fringes a total of 110 mosques, of which 15 are used for Friday prayer. The Al-Eid prayer ground, which consists of around 50,400m², is located just north-west of the city core. It is a walled ground that can accommodate up to 100,000 persons, and is used only twice a year for lesser and greater bairam prayers. Of the city's 110 mosques, At-Taif Endowments has 88, while the remaining 22 are privately owned. Out of 62 mosques, selected at random, I found (August 1971) that they were all supplied with electricity, while only 25 had conveniences. To alter it, the city - within its present limites - needs no more mosques, but more attention is required to those it already has.

Ibn Abbas (the Prophet's cousin) is the main and largest mosque in the city. The only city library is attached to it. This mosque is the only one in the city which ladies used to frequent for prayers.** They go there mainly for sunset prayer on Thursdays. There are many other historical mosques such as Addas and Al-Koa in Al-Mathnah, and As-Sinoocy in Bab Ar-Ri. Some mosques are used for teaching pupils during no prayer times. Before and during final examinations, students of all levels use mosques for their final revision, mainly because they are quiet and 'blessed' places.

* Royal Order No 21601, dated 8th December 1971

** Islam has not encouraged women to join mosques' prayer

Traffic

The city of At-Taif has more vehicles in relation to the total number of people* than the six cities of the Western Province (Makkah, Jeddah, Al-Madinah, At-Taif, Yonbu and Tabouk). According to Robert Matthew, Johnson-Marshall and Partners' Socio-economic Survey of 1971, 22.1% of its inhabitants had one vehicle or more compared with 14.1% for the six cities. For that, 45% of the city's families had one vehicle, and 6% had two or more, leaving only 49% with none. The majority of the city's vehicles were privately owned (82%), whereas there were only 1% buses, 4% taxis, 5% commercials and 8% motorcycles. Private cars took the lead also in journeys' percentage, as 49% of the total journeys were by them, whereas only 1% were by buses and 9% by taxis. The rest were divided between walking, bicycles, motorcycles, commercials and official cars. 44% of the journeys were for work, 30% for home, 10% commercial, and 2% for public transport. The rest were divided between pleasure, private and social journeys.

By 1971, there were around 11,000 vehicles** in the city. Most of these vehicles were registered in Jeddah or other main cities where major importing companies exist. Few are registered in At-Taif, a situation that made figures concerning the number of vehicles registered here (it appears regularly in the Statistical Year Book series) of little value, as it does not show the actual number. However, there were 392,

* Standard of living is dealt with in Chapter 3

** Motorcycles are excluded

351, 579, 718 and 587 vehicles registered in At-Taif city in the years 1967-68, 1968-69, 1969-70, 1970-71 and 1971-72 respectively.¹⁶

Many factors have caused the increase in numbers of vehicles in the country - for example, easy terms offered by the Government through low tax, or by the importers through hire purchase, cheap fuel, * and the absence of an orderly public transport service. At At-Taif and almost everywhere in the country, the large numbers of vehicles have a remarkably rapid turn-over, which is brought about firstly by many people - especially the rich or young - disliking old models, and secondly by the Government, which 'unregisters' as a taxi any car six years old.** This rapid turn-over is also caused by, firstly, the quality of roads. The city had, in 1972, 44.4 km of streets, of which 12.9 km are unasphalted. Even the asphalted roads are, generally speaking, inadequate, as the asphalt layer itself is not suitable, because of the lack of specialist personnel and equipment. Continuous digging by, for example, Ains and Wells Department, and Electricity Company has been worsened by lack of proper maintenance. Additional damage is caused by rain (Plate 2.7). Secondly, there is high wastage through improper driving and handling of vehicles because of lack of care and knowledge. Accordingly, motor repair methods contributed to the increased early breakdown of vehicles. Guaranteed high

* A litre of ordinary petrol in the city was reduced from 0.28 Riyal (1 Riyal = £0.10) on 13th January 1971 to 0.22 Riyal on 5th September 1971, and further to 0.11½ on 14th September 1974. Accordingly, a gallon is worth 5.3 pence only. Prices, however, differ slightly from one place to another in the country

** Fifth Traffic Conference, March 1972

profits has, on the one hand, raised the number of vehicle repair shops in the city to 218, in September 1971, and to 247 in August 1973, and, of course, attracted many unskilled workers.

The traffic facilities of the city are inadequate. To control junctions, there are 11 automatic traffic lights and a single semaphore which is hand controlled. Furthermore, there are no pedestrian traffic lights and crossings at all. Traffic signs and markings are either inadequate in number or in bad condition and poorly sited. All are of the regular type, i.e., for instance, no direction signs and road markings. Parking sites are few in number and small in size. They are not more than an open space with no markings and charges. However, around the Suq area in the city core parking is difficult, especially in the summer months. It has been worsened by the many multi-storey buildings that were built without provision of garages. Most cars are American and their size does not help the situation as they require more space. However, cars are parked in accordance with the availability of shade. As the city of At-Taif has a cloudier and cooler climate than other cities in Saudi Arabia, the concentration of cars parked on one side of the street, or the other, depending on the movement of the sun, is not quite so clearly marked.

Traffic congestion is seen only in a few streets, especially at peak periods (08 00 - 09 00, 13 00 - 14 00 and 17 00 - 19 00 hrs) and throughout the visiting season. This is caused largely by the narrowness of roads and methods of driving, rather than the number of vehicles. The survey¹⁷ of city daily traffic volumes between 07 00 and 21 00 hrs*

* Average of March - April and July - August 1972

has shown that the eastern entrance of King Faisal Street is the zone of peak flow in the city, as 15,995 vehicles passed it daily. Al-Jaish Street had a total of 13,189 vehicles. Five other census points had figures of approximately 10,000 vehicles or more, while the rest (213 points) had fewer recordings. This congestion is increased also by the absence of a ring road to encircle the city, and as a result, all vehicles going to or coming from eastern, western or southern parts of the country have to go through At-Taif centre. The north-eastern entrance of the city (Al-Hawiyah Road), according to the above survey, is the busiest in truck flow, as an average of 2,167 trucks passed it daily. Ten other points had a daily average of over a thousand trucks. During the Pilgrimage time, vehicles coming from or going in the above-mentioned directions and to foreign countries beyond, increased the traffic volume by 1.6 times on the Al-Hawiyah Road (Trans Arabia Highway), and by 3.9 times on the Liyyah Road (south highway).¹⁸ Finally, such a concentration of traffic has encouraged the establishment of fuel stations, and there were, within city limits, 34 such stations in September 1971 and 38 in August 1973.

The public is much to blame as, for example, there is considerable ignorance of traffic regulations such as sounding motor horns or observing 'no waiting' signs. Where the Municipality has provided pavements for, basically, pedestrians, it is common to see cars parked on them (Plate 2.8), or, at least, a row of fruit sellers' handcarts (Plate 2.9). Dual carriageway islands are used, for example, as sites for a tripod crane of the opposite vehicle repairs shop (Plate 2.10). Large numbers of sheep, goats, cats and dogs are constantly disturbing traffic (Plate 2.11).



Plate 2.8

"Where the Municipality has provided pavements for, basically, pedestrians, it is common to see cars parked on them," Page 106
King Saud Street, eastern side



Plate 2.9

"or at least, a row of fruit sellers' handcarts." Page 106
Ash-Shohada Street, western end



Plate 2.10

"Dual carriageway islands are used, for example, as sites for a tripod crane of the opposite vehicle repairs shop." Page 106

Al-Jaish Street, northern end



Plate 2.11

"Large numbers of sheep and goats are constantly disturbing traffic."

Page 106

King Saud Street, western side

They are compounded by bicycles and motorcycles driven by young people, and by the few donkey-pulled carts. However, the Traffic Act which was approved by a royal decree* has foreseen and covered all problems, but what the country lacks is simply the ability to implement the regulations as laid down.

Water Supply

Availability of water is an absolute fundamental in any expansion of urban settlement in Saudi Arabia. For instance, Jeddah city has reached its present remarkable size solely because of the provision of an adequate supply. A rumour of an expected failure of water supply has always had a dramatic effect as, for example, the reaction to Ralph M Parsons Company's "Review of Wadi Hanifa Water Resources, Riyadh" (1959) that caused direct sharp falls in land prices. Rapid rise in urban population, settlement size, standard of living and continuous development have remarkably increased the rate of water consumption. Apart from desalination, all other ways involve drawing from the limited underground sources. This is causing, in many places, a great decline in the agricultural exploitation.

As regards the city's water supply, two opposing points should be borne in mind. The city, as well as the study area, (in comparison with most of the country) receives more rainfall, while on the other hand, has fewer aquifers because of the underlying structure and slope.* *

* Royal Decree No M-49, dated 23rd December 1971

** See pp 25-6 and p 34 of Chapter 1

For this reason, water is found mainly in the alluvium and weathered rocks which are concentrated in wadi beds. Being next to Wadi Wijj, the city has always had a convenient and dependable supply. For this reason it has been described by many writers such as Ibn Allan (1588-1647 AD) as "a town of running waters".¹⁹ However, this is the case for old, and small (in terms of size and number of population), At-Taif.

The situation changed after 1945, when a shortage of supply (during summer time only) was witnessed. To solve it, a number of reports were written. Since no real attempts took place, and bearing in mind the continuous increase in the city's size and population (particularly permanent), the shortage had become quite fearful by the mid-fifties. Up till then, the city depended for a source on Ain Shobra* which flows in underground tunnels from Wadi Wijj (upstream of Al-Mathnah orchards) to the city. Prince Faisal, now King, donated this ain to the city. Additional sources came from a number of widely scattered wells. These were engulfed by the expanded urban area (such as Ajlan and Hawaya) have been badly polluted. They were once extremely important, especially if one takes into account the number of horizontal beams which supported the pulley. This shows former pressure of consumers and the quantity of water available (Plate 2.12).

By 1956, a dam had been built across Wadi Wijj downstream of Al-Wahat village. By storing up to $1,650,000\text{m}^3$ of flood waters, Akramah dam has provided by means of seepage a more permanent source

* The ain here is known as a qanat in Iran, karez in Afghanistan, and foggara in Levant



Plate 2.12

"They were once extremely important, especially if one takes into account the number of horizontal beams which supported the pulley. This shows former pressure of consumers and the quantity of water available."

Page 108

Quarter of Old Ash-Shohada



for the ains. Also, the authority has rented from Ain Al-Mathnah owners ten daily hours,* only during summer time. In 1958, the daily consumption was about $3,424 \text{ m}^3$ ($1,250,000 \text{ m}^3$ per year).²⁰ This was, in fact, more than the amount provided by the local present sources. Accordingly, the future looked grim. However, the matter became settled when the owner of (the newly repaired) Ain Al-Faisaliyah (again King Faisal) endowed it (summer 1963) to the city. By 1963-64, the city's daily consumption had increased to about $3,971 \text{ m}^3$ ($1,448,300 \text{ m}^3$ per year).²¹

To get to the root of the problem, the Government employed, in the summer of 1965, the international firm, Italconsult, to study and develop fully all available and reliable waters in At-Taif, Jeddah and Makkah regions.** The Final Report which was submitted in February 1969 indicated, among other things, that water in large quantities may be found some distance from the city and outside the Amirate - namely in the westerly Wadi Naman and the easterly Wadi Tarabah.

Up to early June 1970, the city was not served by a network of water pipes. Instead, there were 25 bazans, i.e., underground tanks which were scattered among the quarters (Fig 2.8). These bazans, which have a total capacity of $9,000 \text{ m}^3$, are filled either directly by ains flow or by water trucks. Using buckets, the water carriers fill up the twin containers and carry them to consumers. Another way

* Output is usually based on time rather than volume

** The title of this project is Water Supply Surveys for Jeddah-Mecca-Taif Area



Plate 2.13

"There are also some 84 sites in and around the city which are supplied freely by water trucks. There water is consumed by poor people (above) or drought victims."

Page 110

Sub-quarter of Wadi An-Naml

water-trucks, and 15% by water carriers. Continuous increase of water pipe subscribers has not yet greatly affected other methods of water delivery - as expected. Regarding the number of water carriers there is a slight increase. Comparing their registered number in the first halves of 1391 and 1393 AH (26th February 1971 to 21st August 1971, and 4th February 1973 to 29th July 1973), I have found that there was an increase, as there were 466 water carriers in the first period compared with 487 in the second. This increase has been in 19 of the city's existing 23 bazans, while there is no change in three, and only one that has fewer water carriers than during the first period. The only improvement to this means of supply is that buckets have been replaced by taps to prevent pollution (Plate 2.14). Also, animal-drawn tank carts have been prohibited for the same reason. Delivery by water trucks is probably more affected by pipe connection, as available data shows (Fig 2.9). These data, in addition to being of limited time, are only available for water trucks that have been loaded by Ains and Wells Department. There are, in fact, many drivers who fill up their water trucks from private wells in the nearby agricultural areas such as Al-Qaim and Rahab. They do this simply to avoid a long queue that may last for several hours (Plate 2.15).

Difference in water prices varies depending upon the type of delivery. The cheapest (£0.05 per m³) is provided by the Ains and Wells Department. This price, in due course, has attracted almost every citizen to become a subscriber. To be one, a citizen should have, among other things, an underground tank in his dwelling. On the other hand, a cubic metre delivered by water carriers costs around



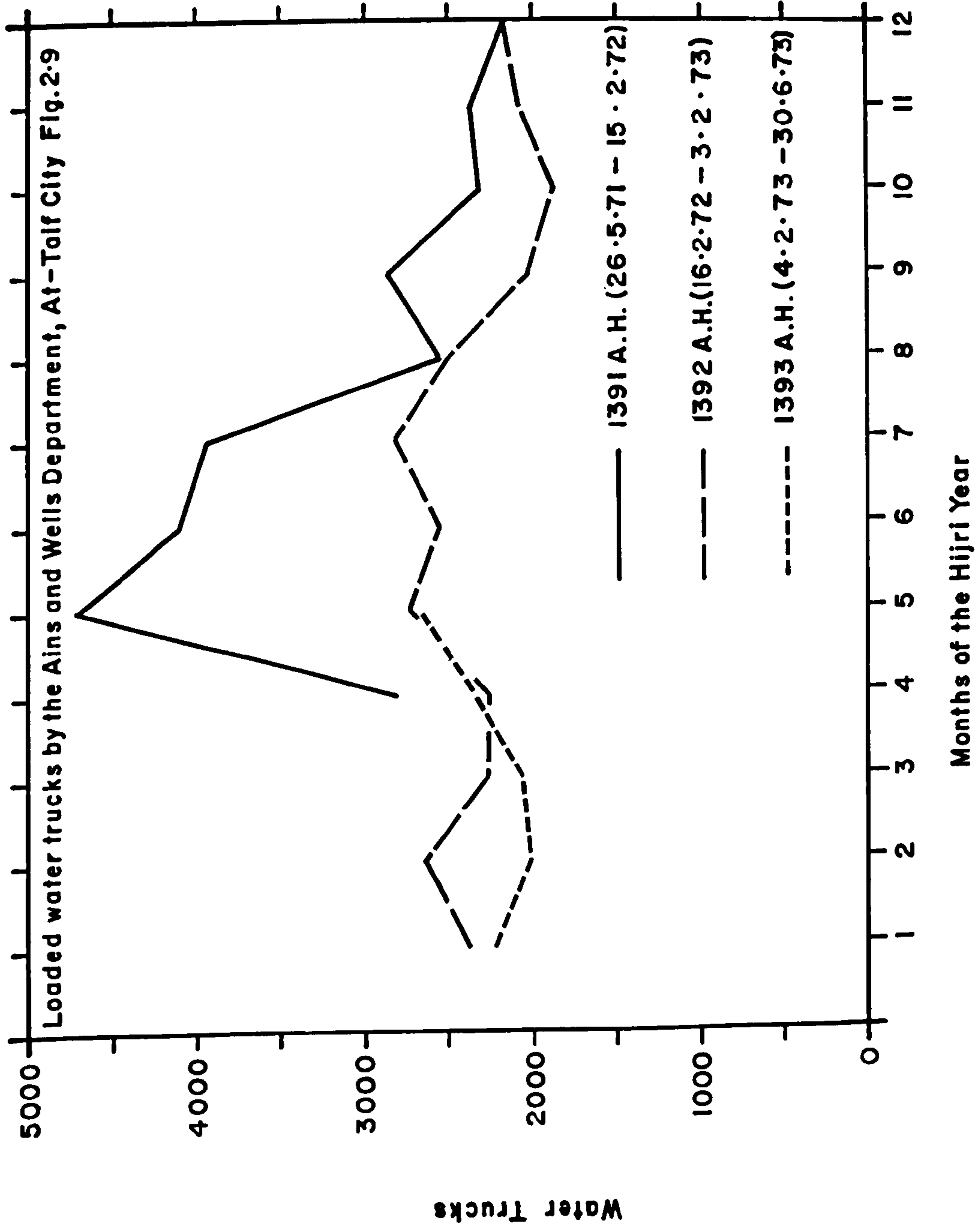
Plate 2.14

"The only improvement to this means of supply is that buckets have been replaced by taps to prevent pollution." Page 111
Quarter of As-Solaimaniyah



Plate 2.15

"They do this just to avoid a long queue that may last for several hours." Page 111
Wadi Wijj within At-Taif city



£0.65. If delivered by water trucks, then it costs about £0.30. Weak or discontinuous flow in pipes has prevented subscribers - particularly in apartment buildings (39.6% of the city's population) - from depending solely on this mode of delivery.*

As was mentioned earlier, the continuous rise in the standard of living is a vital factor in the increase of water consumption. The Robert Matthew, Johnson-Marshall and Partners Socio-economic Survey of 1971 shows that 58% of the city's population had WC with flush, and 56% had a bath, shower or both. This accentuated the imbalance between water supply and demand. For example, the 40,000m³ tank downstream of Al-Wahat village, which is supposed to reserve water, has been empty for quite some time. This made the authority aware of the presence of possible cracks. Accordingly, the Ains and Wells Department has turned towards the remaining ains in Wadi Wiji. Simply, the ains of Al-Mathnah, Al-Wahat and Al-Wohait have been bought at a cost of £838,449. This deal saw the end of these pre-Islamic orchards and vineyards.

After the purchase, the Ains and Wells Department started a £140,000 project to clean and repair Al-Wahat and Al-Wohait ains. During the works (at an average of 14 metres below wadi bed) many other long-forgotten ains were discovered. Records suggest that this area of Wadi Wiji may once have had a total of 65 ains. Nowadays, only five ains remain. The early active inhabitants left no indication

* The Ains and Wells Department is not responsible if the water flow is insufficient. From Article 21, Subscription Contract

of the sites of infiltration galleries or shafts for fear of possible revengeful works. Repairing and cleaning made the daily output of both ains much greater. For instance, Al-Wahat daily output is $2,000\text{m}^3$. Accordingly, the total output of all ains has once more stopped the supply shortage.

Planning for the immediate future, a dam is being built on the nearby Wadi Liyyah, east of the city. Also, the Government has employed Sogreah of France to study the present and future of the city's water supply and demand. Reports presented by the above firm in January 1974 showed, again, that water must be brought from Wadi Tarabah, i.e., from a distance of 115 km east of the city. When the firm finishes the first stage of the project, which begins in 1974-75, the daily output will be about $17,280\text{m}^3$ ($6,307,200\text{m}^3$ per year). Other studies showed that the consumption in 1991 for households will be between 11.2 and 15.3 million cubic metres, and an additional four to seven million cubic metres for private and public 'green' areas, industry, etc.²²

If this is to be the case, I think the Ains and Wells Department should increase the charge a little per cubic metre in case the rate of consumption is reduced. Also, the concept "the more you use the more you should pay" should be introduced. Another solution could be that buildings with ten apartments or more should have two different pipe installations, one with drinking water and the other not. The latter pipe will draw from polluted wells till a domestic sewer network is built. Furthermore, Article 4 of the Subscription Contract indicates that there is a monthly minimum consumption of 10m^3 , for which there

would be a full charge even if the meter recorded less. This, however, has made people who normally use less than 10m^3 a month more ready to waste the rest since they are going to pay for it. Another point is that, though meters should be read monthly (Article 3), the majority of subscribers have either not paid for quite a long time, or have never paid at all. This is because the Department's two meter readers have insufficient time to read them all. This has led many people to believe that their former consumption will be forgotten because of the length of time which has passed since the last reading though (Article 8) they have paid a deposit of £10. Another point which has affected data collection was that I was unable to obtain the data concerning the monthly consumption rate.

From the technical point of view, the few stopcocks in the pipe network has meant that the main pipe (six to eight inches in diameter) is cut to connect a half-inch pipe. This work, which is technically wrong, is weakening the system and reducing the flow through installed pipe fittings. Another point is that the subscriber must bring his workers to do the whole job - from the main pipe to his door step. This has resulted in pipes being laid down only just beneath street level, which in due course means that they are easily damaged by traffic and subsequent road works. Another problem is that the inspection chamber covers were made of weak material which cannot withstand heavy traffic. The main reason for these careless mistakes was the need to carry out everything as cheaply as possible. In addition, the technical know-how is largely absent.

Finally, the absence of a domestic sewage network* has affected all nearby wells as well as many places such as Al-Byashah Street, where the soil cannot absorb completely the waste water from dwellings. The capacity for absorption lessens in times of rain because of the absence of a rainwater drainage network. * However, this is not too disastrous because of the site of the city and the angle of slope. One result is that material is being deposited in the low quarters, which in due course gradually raises the level of the streets (Plate 2.16). High areas, on the other hand, are being eroded and gradually lowered (Plate 2.17).

* Sauti, the Italian firm, is at present carrying out a study concerning this service

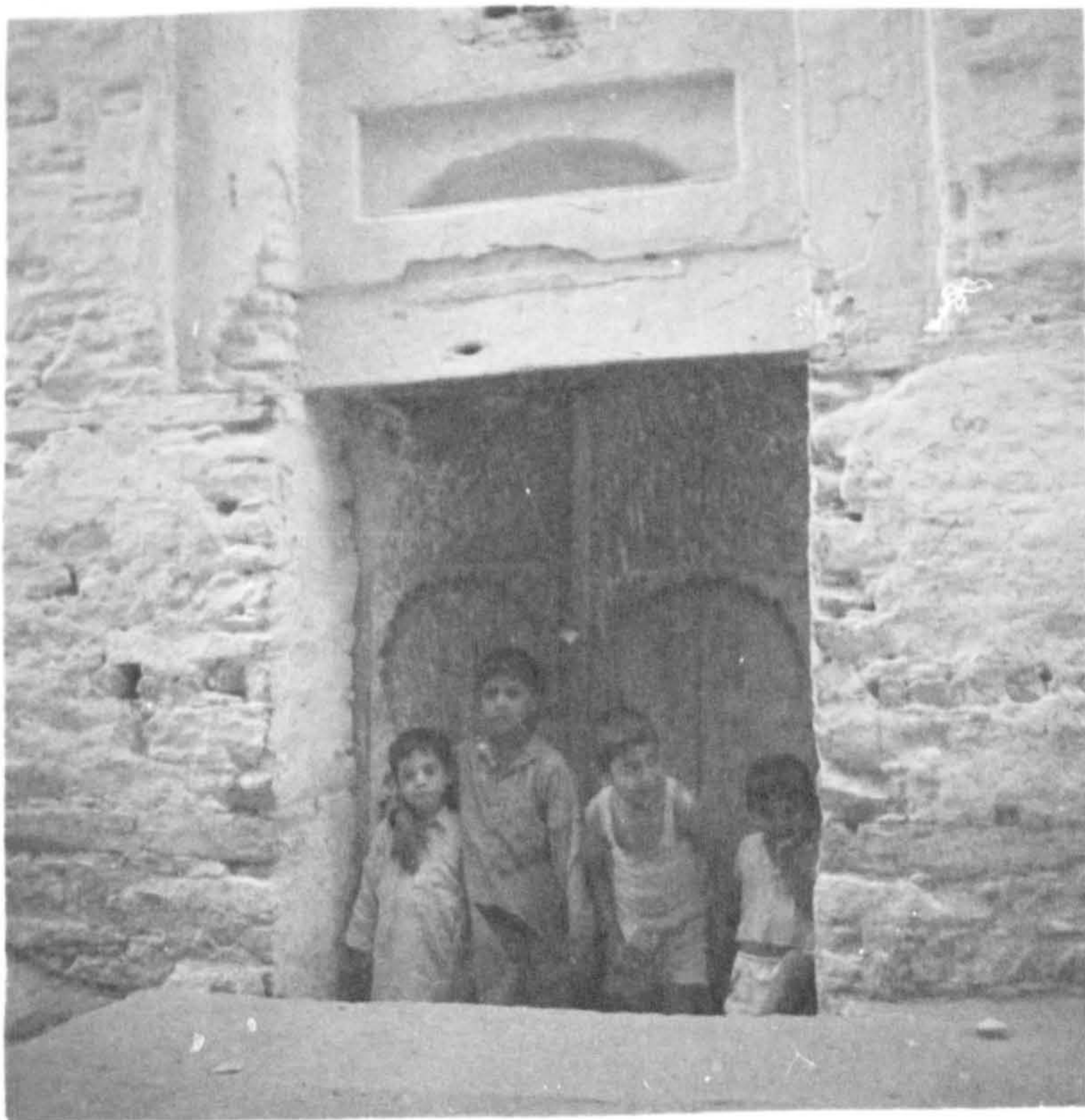


Plate 2.16

"One result is that material is being deposited in the low quarters which in due course gradually raises the level of the streets." Page 115
Quarter of Asfal



Plate 2.17

"High areas, on the other hand, are being eroded and gradually lowered." Page 115
King Saud Street, looking east

REFERENCES

1. Al-Hamadani, A , Sifat Jazirat Al-Arab, Cairo, 1953, pp 211-212, (Arabic)
2. Yakut, Mojam Al-Buldan, vol 4, Beirut, 1957, p 11 (Arabic)
3. Ibid, vol 5, p 386
4. Ibid, vol 4, p 11
5. Ibid, vol 4, p 9
6. Burckhardt, J L, Travels in Arabia, vol 1, London, 1829, pp 154 and 157
7. Doughty, C M, Travels in Arabia Deserta, vol 2, London, 1936, p 538
8. Pasha, M S, Dalil Al-Hajj lil-warid ela Makkah wa Al-Madinah min kul fajj, quoted from Miraat Al-Haramain, by Pasha, I R, vol 1, Cairo, 1925, p 346 (Arabic)
9. Az-Zirikly, Ma-Raait wa Ma-Samet, Cairo, 1923, p 75 (Arabic)
10. Rutter, E, The Holy Cities of Arabia, London, 1930, p 338
11. Robert Matthew, Johnson-Marshall and Partners, Alternative Urban Strategy (Jeddah-Taif-Yonbu), Western Province Plan, Taif Section, 1972, p 38 (Arabic edition)
12. Robert Matthew, Johnson-Marshall and Partners, Regional Framework, Western Province Plan, 1972, p 156 (Arabic edition)
13. Central Planning Organisation, Economic Report (1967-1968), vol 1, section 5, 1969, p 61
14. Moslim, Sahih Moslim, vol 5, Cairo, 1930-31, p 151 (Arabic)
15. Ibid, vol 5, p 14
16. Central Department of Statistics, Ministry of Finance and National Economy, Statistical Year Book, vol 8, (1971-72), Ar-Riyadh, 1972, p 254, and vol 9 (1972-73), Ar-Riyadh, 1973, p 271

17. Sauti, City of Taif (Improvement and Beautification of Urban Streets) Phase 1, Preliminary Project, Annex 2 and 3, 1972
18. Robert Matthew, Johnson-Marshall and Partners, Alternative Urban Strategy (Jeddah-Taif-Yonbu), Western Province Plan, Taif Section, 1972, p 81 (Arabic edition)
19. Ibn Allan, M, Taif At-Taif fi Fadhl At-Taif, about 1638, p 32 (Manuscript, Arabic)
20. Parsons Engineering Company, R M, Preliminary Report on Water Supply for the City of Taif, Los Angeles, 1958, p 3 (Manuscript)
21. Hosain, A, Studies on At-Taif, Jeddah, 1964, p 14 (Manuscript, Arabic)
22. Robert Matthew, Johnson-Marshall and Partners, Regional Framework, Western Province Plan, 1972, pp 284-285 (Arabic edition)

CHAPTER 3

URBAN POPULATION

Data Sources

Though population data in Saudi Arabia are scanty, they have been considered 'confidential' by the body responsible for their collection - the Central Department of Statistics. This is a major obstacle standing in the way of any related research projects. Consultant firms, for example, have to carry out their own surveys of the population of their study areas. As far as the present work is concerned, the writer has managed to obtain the following material, taken during the years 1962-63, 1966 and 1971. As its interpretation is based on the writer's personal investigation, it is possible to say that the overall picture of the city of At-Taif's population will closely resemble the actual situation.

1. Data furnished by the 1962-63 census, which was conducted by the Central Department of Statistics. This provides the total number of inhabitants, males and females in the city and in each quarter. Nationality and age of the population as well as other related information is also provided.

2. Data furnished by the 1966 official sample survey, which was, again, conducted by the Central Department of Statistics. This material provides percentages of the city's total population according to nationality, age, sex, marital status as well as other related information.

3. Data furnished by the 1971 semi-official socio-economic survey, which was conducted by Robert Matthew, Johnson-Marshall and Partners. This survey provides, generally speaking, the same information as the other two sources.

Population Growth

As shown in Table 3.1, the city of At-Taif had in 1962-63 a population total of 53,954 persons. This is, however, the result of the first census to be held in Saudi Arabia. As it showed lower population numbers than expected, its results were soon repudiated by the Government, since the census was considered unreliable and did not represent the actual situation. The blame was directed towards the public, who were accused of being ignorant or suspicious of the census aims. This is, however, a result of the small effort, publicity, equipment and quality of manpower involved in data collection. Also, it is my personal view that the Yemen War, which was then at its peak, deeply influenced the people's response (at least that of the urban population): fewer people responded because they feared conscription.*

Accordingly, the Central Department of Statistics conducted in April 1966 an official sample survey of the population in order to correct the 1962-63 figures. According to this survey, the city of At-Taif had a total population of 77,000 persons. Comparing it with 1962-63 figures (53,954), one can see that there has been an increase of 23,046 persons, or 42.7%, in just 40 months. Such substantial rates of increase have made many concerned bodies in the Government believe that it does not

* To assure the highest possible accuracy of the new census (conducted by the Central Department of Statistics, 9th-16th September 1974), the head of each family (almost entirely male) was ordered not to leave his home before 1100a m on the 15th and 16th of September 1974. For example, it has been decided to make the official hours at Government departments and companies on these two days between 1100a m and 200 pm to facilitate the census operation.

TABLE 3.1
Population Growth in At-Taif City 1962-63 - 1971

Year	Population	Population Growth	
		Numbers	Percentage
1962-63	53,954	-	-
1966	77,000	+23,046	+42.7
1971	106,000	+29,000	+37.6

Source : 1962-63 and 1966 : Central Department of Statistics,
Ministry of Finance and National Economy.

1971 : Robert Matthew, Johnson-Marshall and
Partners, Socio-economic survey of Western
Province, Saudi Arabia.

accurately record the true situation. Their argument is that one of the reasons why the census of 1962-63 was rejected is that it showed low population figures. As a result, the 1966 survey, which is based more or less on samples, overestimated numbers. I believe, however, that this rate of growth is acceptable. This hypothesis is based on the following points:-

1. The city of At-Taif has increased its area remarkably during the period 1964-71. In figures, its size in 1964 was 4.8 sq km, and by 1971 it becomes 9.7 sq km - an increase of 4.9 sq km.* Such increase in the city size must, naturally, follow or match the population growth.

2. Relying on personal observation and investigation, it is possible to say that the dwellers of the newly built-up areas are not from At-Taif city and - in most cases - Amirate. They are largely rural migrants that have been attracted by availability of jobs and work opportunities. As they prefer to settle in groups, their presence becomes more noticeable. The Al-Bayashah sub-quarter in Shobra is a unique example of such grouping, as it contains those who left Bishah town and region to go to At-Taif (see Chapter 9).

3. In addition to inter-urban movement, immigration, and the absorption of surrounding villages into the expanding city, it could be suggested that the recent development of medical services provided has influenced the natural increase. There are, however, no data to support this hypothesis.

However, Table 3.1 shows also that the population of the city of

* See pp 72-73

At-Taif had reached 106,000 persons by summer 1971. This is according to the Robert Matthew, Johnson-Marshall and Partners' socio-economic survey of Western Province. This means an increase by 29,000 since April 1966, or 37.6%. It also means that the city's population had doubled in less than nine years.

During the 1971 data collection by Robert Matthew, Johnson-Marshall and Partners, dwellers were asked questions about their place of birth. Fortunately, these questions were also related to the year 1966. However, percentage of birth place in At-Taif city in 1966 and 1971 is shown in Table 3.2. Data on the neighbouring cities of Makkah and Jeddah are shown also for comparison purposes. The table shows how remarkably the city population has increased through migration. Its rate is increasing constantly, since the 'pull' and 'push' factors are still powerful. For example:-

1. 62.4% of the city householders in 1966 were born in it, whereas this percentage had been reduced in 1971 to 16.2%. In other words, 37.6% of its householders in 1966 were born outside the city as compared with 83.8% in 1971. This is not the case for At-Taif only, for almost every city in the country is receiving waves of newcomers in varying numbers. The cities of Makkah and Jeddah had, respectively, in 1966, 84.9% and 71.1% of their householders who were born there. By 1971, the percentage had changed to 41.4% for Makkah and 11.8% for Jeddah.

2. Although At-Taif's percentage looks similar to that of Jeddah, there is a distinct difference between them. The answer lies in the origin of these new settlers, as 52.9% of Jeddah's householders in 1971 were

TABLE 3.2

Percentage of Birth Place per Householder in Three Selected Cities in 1966 and 1971

Place of Birth	At-Taif		Makkah		Jeddah	
	1966	1971	1966	1971	1966	1971
Same city	62.4	16.2	84.9	41.4	71.1	11.8
Another city within Western Province	10.2	15.1	2.3	3.2	4.8	11.3
Rural Area within Western Province	4.8	14.4	1.2	8.5	1.7	8.4
Rural Area (Asir)	3.8	14.2	1.0	4.7	3.1	12.3
Rest of Saudi Arabia	6.5	5.5	0.9	2.4	2.4	3.4
Outside Saudi Arabia	12.4	34.8	9.8	40.8	17.0	52.9
Outside the city	37.6	83.8	15.1	59.6	28.9	88.2
Outside the city (inside Saudi Arabia)	25.2	49.1	5.3	18.6	11.9	35.3

Source : Robert Matthew, Johnson-Marshall and Partners, Socio-economic survey of Western Province, 1971

born outside Saudi Arabia, in comparison with 34.8% for At-Taif. Makkah, however, which shows a smaller percentage of those born outside it (59.6%) is, in fact, changing moderately, as its 'pull' and 'push' factors are almost equal in effect, unlike Jeddah, for instance, where the 'pull' factors are remarkably stronger than the 'push' ones. At-Taif, for example, has received 11.0% from Makkah out of the total (15.1%) which it received through inter-urban movement within the Western Province in 1971.

3. Regarding the origin of movement within the country, At-Taif takes the lead as 8.6% and 28.6% of its householders in 1966 and 1971 were born in rural areas within the Western Province and Asir, in comparison with 2.2% and 13.2% for Makkah, and 4.8% and 20.7% for Jeddah.

Population Distribution

Like any other urban area, the city of At-Taif has a variable population density. This can be understood by viewing Figure 3.1, which shows the population density in the city quarters as it was recorded in 1962-63. For example, the core which consists of Fooq, Asfal and As-Solaimaniyah quarters in addition to the adjacent quarters of Ash-Sharqiyah and Al-Yamaniyah is the most densely occupied part of the city of At Taif - respectively 135.5, 108.7, 105.5, 230.5 and 177.0 persons per hectare. This is a result of the following factors:-

1. Its built-up area is so closely packed that there are hardly any wide streets or open spaces.
2. Its inhabitants are permanent and, accordingly, it is crowded

POPULATION DENSITY IN THE CITY OF AT-TAIF
SOURCE OF DATA 1962-63 CENSUS

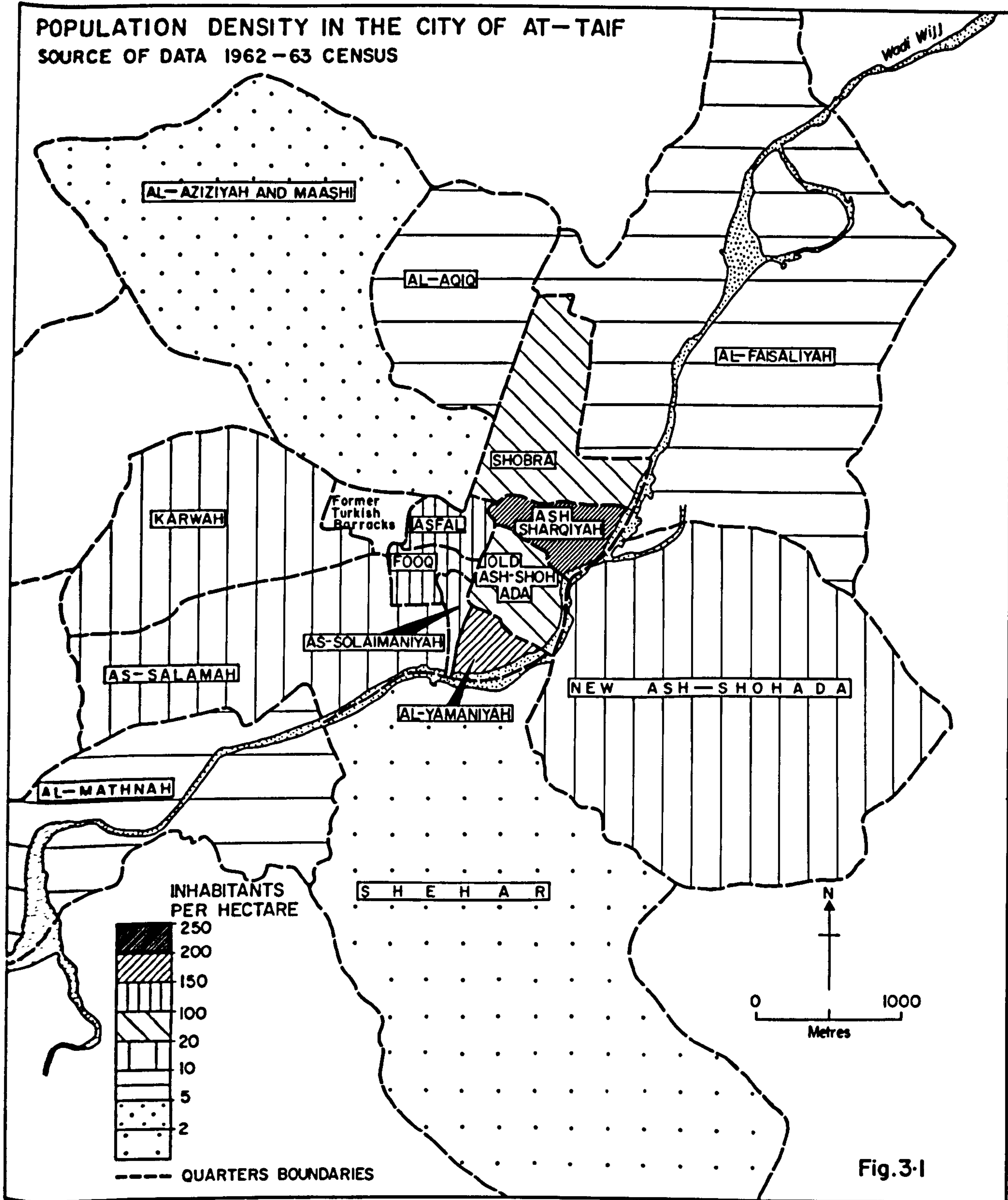


Fig.3-1

throughout the year.

3. Finally, as the core contains the city suq, it is a highly desirable residential area.

Apart from this central part, the eastern and western parts of the city of At-Taif show a contrasting situation as regards their population density. On the one hand, the western quarters, and in particular Shehar, are the city's less populated areas, for they contain mansions and villas which are surrounded by gardens and yards - low-density housing. In addition, they have few permanent dwellers, i.e., they are lived in during the summer season only. On the other hand, the eastern quarters, and in particular NewAsh-Shohada, are densely packed areas, though less so than the central part. Here almost all the building owners are permanent citizens. Accordingly, it is less affected by the visiting season than the western quarters. In general, however, the density of the whole city population increases in the summer months, as to its permanent dwellers (106,000 persons in 1971) are added an extra 33,000 persons. During the summer, then, the percentage of the permanent population is 69%, while that of the 'floating' population is 31%. However, since the city's total population has doubled within the period 1962-63 - 1971, remarkable changes must have occurred. But, unfortunately, absence of fresh data prevents any further interpretation.

Ethnic Affinities

The city of At-Taif - unlike its rural environs - has a small number of people who can trace their origin back to one of the three dominant tribes (Adwan, Thakif and Koraish), which since pre-Islamic

times inhabited the area. The rest of its inhabitants can be divided, according to their origin, into four groups:-

1. Those who belong to a tribe within the Amirate of At-Taif or, on a large scale, within the country.
2. People who can trace themselves to an Arab source.
3. Those who are of non-Arab origin.
4. The rest who know nothing of their origin.

This composition, though mixed, is much less complex than the well-established one of Makkah and Al-Madinah population for the sole reason that there is a powerful religious magnet there. At any rate, immigrant population and minority groups are dealt with in detail in Chapters 4 and 9 respectively.

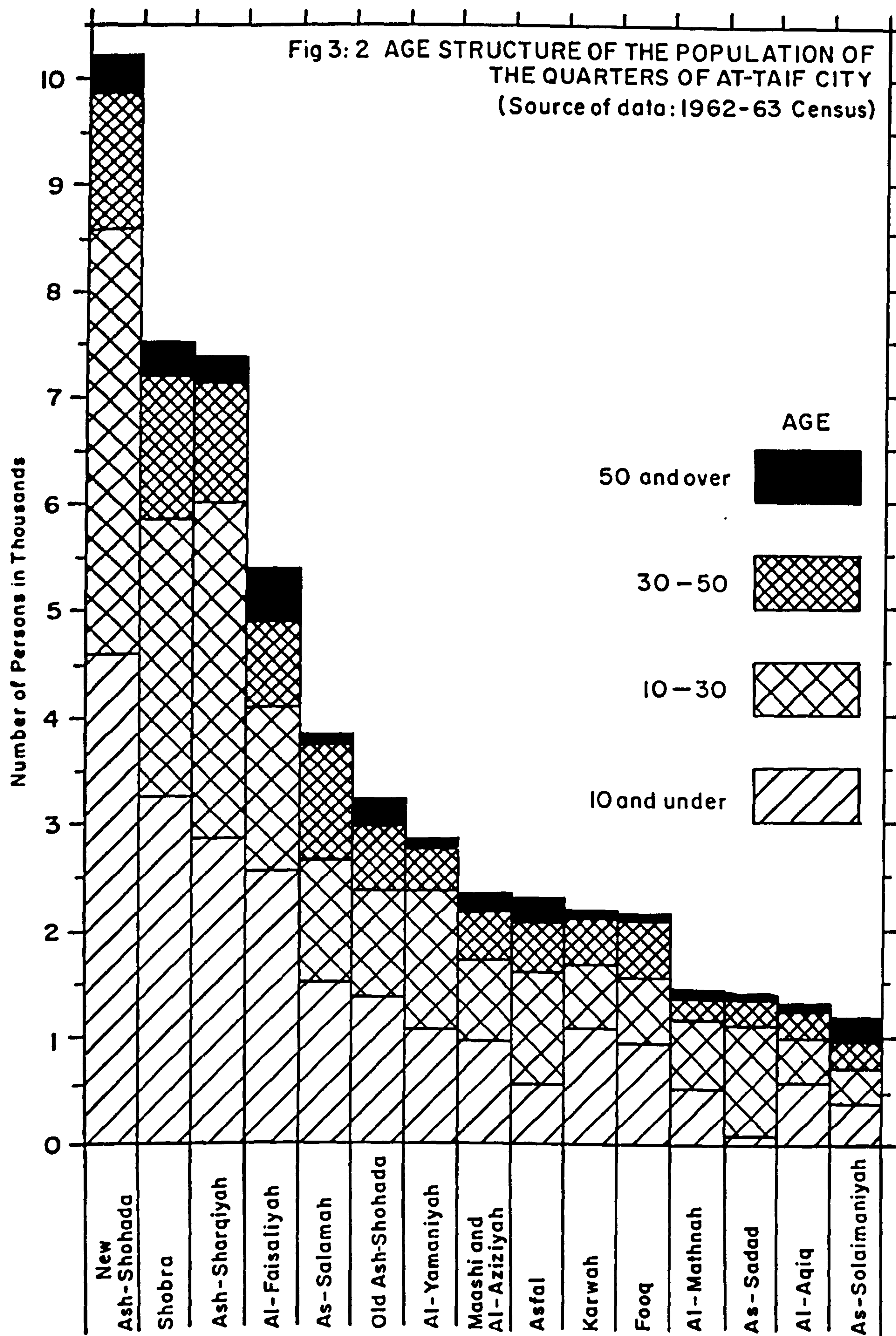
Population Composition

A. Age-Structure

The 1962-63 census divides the city population as regards their age into four groups only : ten years or less, 10-30, 30-50, and 50 years and over. Such grouping, in addition to being very broad, is also overlapped. Furthermore, it is not classified by sex or nationality. Accordingly, such shortcomings have affected to a considerable degree the interpretation of its structure. However, the census has provided some useful and interesting points concerning the age-structure of At-Taif city population. For example:-

1. 22,653 of its total population (42.0%) are infants - ten years old or less. This is the case throughout the city quarters except one - As-Sadad. As seen in Figure 3.2, the quarter of As-Sadad has 49 infants out of its 1,425 inhabitants. Such a phenomenon is related to the fact

Fig 3: 2 AGE STRUCTURE OF THE POPULATION OF THE QUARTERS OF AT-TAIF CITY
(Source of data: 1962-63 Census)



that the enumerators have included the in-patients of the Psychiatric and the Tuberculosis hospitals (2,114 beds in both) which are sited here, as residents of the quarter of As-Sadad. As a result, the number of infants has been influenced remarkably by the high number of in-patients - almost totally adults.

2. 19,913 of the city's total population (36.9%) are 10-30 years old. Hence it is possible to say that this group contains infants (less than 14 years old), adolescents (14-19 years), while the rest are considered young adults - too mixed for any valuable interpretation. However, though it is twice as wide as the previous group (0-10 years), it has a smaller percentage of the total population. This is, however, mainly related to high fertility which is, in addition, influenced by high mortality.

3. 9,030 of its total population (16.7%) are 30-50 years old. They are, however, older adults. This shows the noticeable percentage reduction of successive age groups. It is a result of high mortality which is caused in turn by unreliability of medical services and much malnutrition.

4. 3,258 of the city's total population (4.4%) are 50 years old or over. This group may be subdivided into older adults (up to 64 years old) and aged people (65 and over). Persons approaching their early 50's appear much older than their actual age. This is a result of the hard life they have experienced; and hence expectation of longevity is less. Accordingly, their tiny proportion provides a contrast to the Western world, where they constitute a much larger proportion of the total population.

As far as the 1966 official sample survey is concerned, it is far

more detailed than the 1962-63 census. For instance, it classifies according to sex and nationality. It is thus possible to draw the age-sex pyramid of the Saudi population At-Taif city (Fig 3.3). Percentages (numbers are not available) are calculated separately for each sex and not for the total population which would usually result in differing pyramids. Figure 3.3 shows these major features which generally support the results of the 1962-63 census.

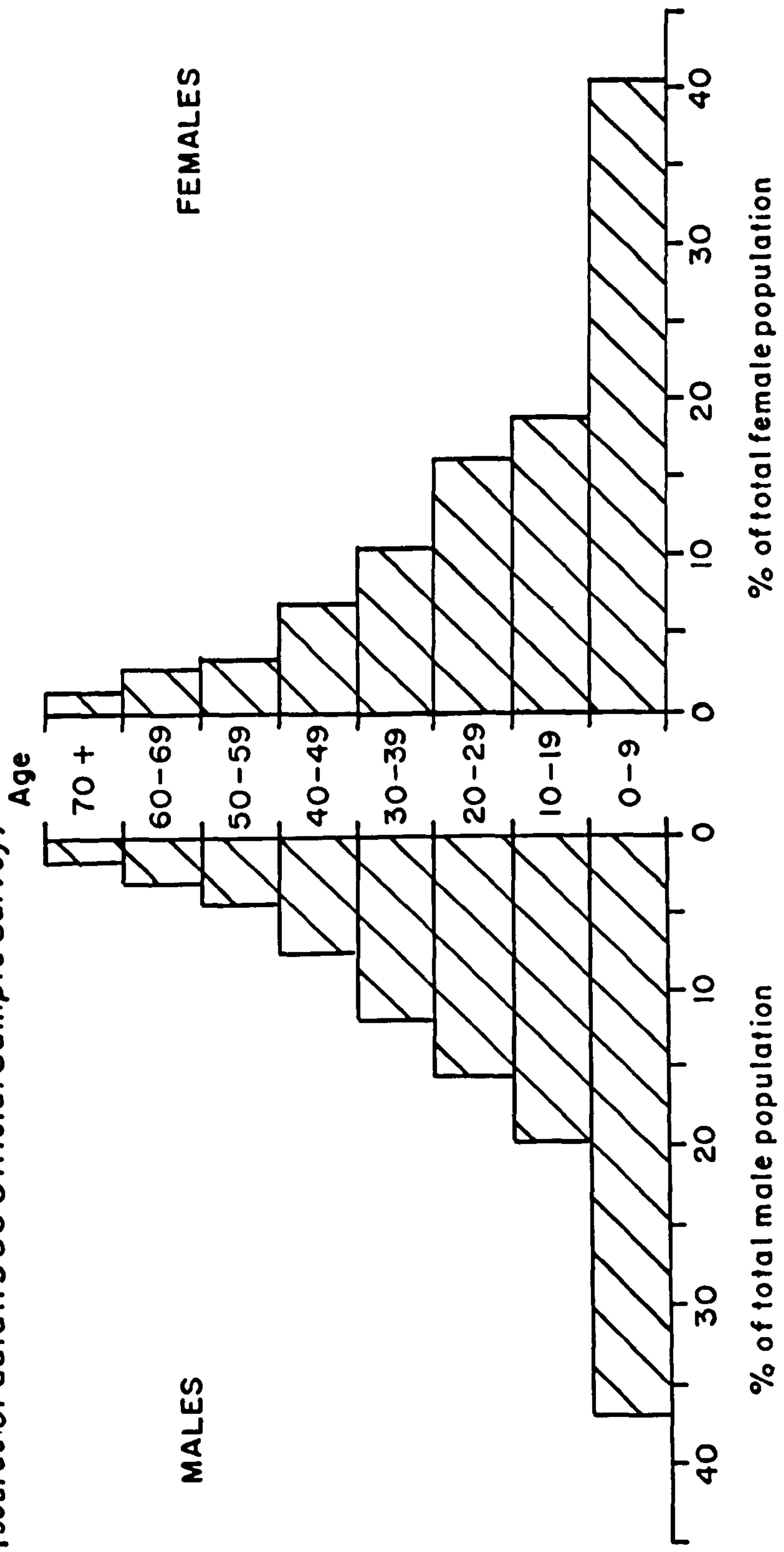
1. The population pyramid has a wide base which reflects a combination of high fertility and mortality. 40.3% of the total female population and 36.9% of the total male population (38.6% of both sexes) are nine years old or less.

2. The second feature is the high mortality among children. This is perhaps largely due to the low standard, availability and use of medical and sanitation facilities. While the group aged 0-9 years make up 38.6% of both sexes, the next group, aged 10-19 years, make up 19.2% of both sexes : 18.7% of females and 19.7% of males. There are no data available on deaths, but the remarkable frequency with which dead children are brought to mosques for prayer before burial shows the high mortality.

3. High fertility and high mortality have caused a noticeable reduction in the size of successive age groups. Very few old people are to be seen among the whole population. For example, 2.8% of the total female population are 60-69 years old (1.3% are 70 years old or over) and 2.9% of the total male population are 60-69 years old (1.4% are 70 years old or over). These percentages, which are based on samples, do not show exactly whether mortality is higher among females than

AGE-SEX PYRAMID OF SAUDI POPULATION IN AT TAIF CITY
(source of data: 1966 Official Sample Survey)

Fig 3:3



males, or which sex predominates as the pyramid top is approached.

As far as the socio-economic survey of summer 1971 is concerned, it shows similar facts to those of the 1962-63 census and the 1966 sample survey. According to it, the city population age groups exhibit the following percentages:-

<u>Age</u>	<u>Percentages</u>
0 - 4	17.8
5 - 14	31.1
15 - 24	15.8
25 - 44	25.3
45 - 64	7.8
65 +	2.2

This means, again, that almost half the total population (48.9%) are 14 years old or less, and as low as 2.2% are of people aged 65 and over. However, such a high proportion of infants is related largely to the Islamic faith which encourages, first of all, marriage. Secondly, by encouraging birth, Moslems are thus increasing their numbers. In this context, birth control is still an alien practice among the majority, though it is not prohibited. It is only the educated (not the better off) who talk about and practise such control, but even those people reject it if they have not achieved a male heir. This is based on strong customary ties, but will this be the case for ever? I believe that there will be

changes because of the rapidly changing way of life and values, which are related to the extension of education, and the continuous rise in the standard of living. Accordingly, the shape of the age pyramid will tend to become more regressive than progressive. This means, in addition to lower fertility, there will be a decline in mortality, controlled by wide expansion of health services. Another factor to diminish the use and value of birth control in the people's eyes is that they have not yet felt the need for it, simply because of the country's wealth.

Finally, the high percentage of infants (less than 14 years old) means, particularly as we are dealing with an urban area not a rural area, that a good part of the population are neither productive nor reproductive. To distinguish the productive and reproductive, then, it is misleading to believe that they include all people between 15 and 64 years of age (48.9%). This is so because : (a) almost all adolescents (14-19 years old) are being educated, and, (b) people of 64 years and a little less are mainly not working people. (c) Females are the third element. They make up 49.2% of the city's total population, but they are almost wholly non-working. For example, the percentage of working females (teachers, etc) is just 4% of females between the ages of 15 and 64. Accordingly, it is clear that about 20-25% of the city of At-Taif population are heavily responsible for supporting the rest (not less than three-quarters of the population). That is to say, since every family on average contains 5.5 persons, it is the responsibility of the father - alone - to support his wife, children, the females and elderly people of his family.

B. Sex-Ratios

Sex-ratios are probably more important here than in other countries

because of the remarkable difference between male and female in both the eyes of society and economy. In 1962-63, there were 29,295 males (54.3%) as compared with 24,605 females (45.7%) : a majority of males by 4,690. This is the case in all the city quarters. In detail, there is more dominance of males in quarters connected with trade and business, such as Asfal (1,311 males to 971 females), and Fooq (1,250 males to 918 females). Purely residential quarters, such as Al-Aqiq (687 males to 626 females), and Al-Mathnah (741 males to 700 females), show an almost equal percentage.

According to 1971 data, there is also an excess of males in the city as 50.8% of its population are males. Other cities of the Western Province of Saudi Arabia show (1971) a similar excess of males, as they number 54.3% in Jeddah, 51.7% in Makkah, 50.8% in Al-Madinah, and 51.9% in Yonbu. At any rate, the city of At-Taif and in general Saudi Arabia, as well as many neighbouring countries, such as Jordan, Iran and Egypt, have a similar excess of males in the population composition. This is related to many associated factors such as female mortality being higher, possibly because of their lower living opportunities, or possibly due to under-enumeration, based on deep-rooted traditional and customary differences between the sexes.

C. Marital Status

Like birth and death, no records are kept for single, married, divorced or widowed cases. The 1962-63 census did not even mention

them. The 1966 survey, fortunately, gives the following percentages (Table 3.3) among the city's Saudi population. Such differing percentages are a result of contradictory factors, such as age structure, sex-ratio, social relations and probably economic conditions. For instance, as we are dealing with a young population, it is easy to see that almost half (47.2%) of the total population are below the age of marriage. The next high percentage in the table is that of married people. Marriage, as mentioned earlier, is much encouraged by both religion and social traditions. So, 35.2% of the total population are married. Another feature is the low percentage of divorced males. This is, however, related largely to the fact that almost all divorced males soon re-marry, while it is difficult for females to do so. This is simply because divorced females are not sought after. Males also have a low widowed percentage, much less than females. This feature is governed by many factors, of which the considerable age discrepancy between married couples is the main one. It is the desire of almost every male, regardless of his age, to marry a female as young as possible.

The 1971 socio-economic survey of Robert Matthew, Johnson-Marshall and Partners gives such details for Saudi Arabia's Western Province, but not At-Taif city. It shows the same features, such as early marriage, and the remarkable percentage differences between divorced or widowed males and females. According to it, the six cities of the Western Province show that 49% of the females and 8% of the males of the population of over 45 years are either divorced or widowed.

TABLE 3.3
Percentage Distribution of Population of At-Taif City by Marital Status, 1966

Marital Status	Males	Females	Both Sexes
Below age of marriage	49.4	45.0	47.2
Never married	14.3	10.8	12.5
Married	34.8	35.6	35.2
Divorced	0.7	2.2	1.5
Widowed	0.8	6.4	3.6

Source : Central Department of Statistics, Ministry of Finance and National Economy

Standard of Living

Urban areas everywhere, though particularly in the Arab world, are places where great differences of standard of living are witnessed. Here, in contrast to squatters and shanty quarters, are the dwellings of the ruling class, high officials, top business men, landlords and so on. In other words (besides poor people) rich and important people concentrate in major urban areas, not rural areas, because here services and amenities are poorly provided. These differences in standards of living become sharper in the city of At-Taif because of its comparatively salubrious climate. As will become evident, this has attracted wealthy people and accordingly raised the general standard of living. Nevertheless, this does not mean that poor classes are absent.

To start with, At-Taif has a higher percentage of wealthy people, in comparison with the cities of Makkah and Jeddah. From Table 3.4 below, 29.4% of At-Taif householders have a monthly income of over £70, compared with 19.8% for Makkah and 18.7% for Jeddah. In contrast, At-Taif has a smaller percentage of low income people. This is to say that 15.7% of its householders have a monthly income of £20 or less, compared with 29.5% and 27.9% for Makkah and Jeddah respectively. This is related (in addition to its climate, which attracts rich people) to the fact that 38.7% of its labour force are engaged in education and other Government services which are in the higher income class. On the other hand, it has a lower percentage of semi-skilled and unskilled jobs in comparison with, for instance, Jeddah. At-Taif has 18.6% of its total jobs classified as semi-skilled, compared with 24.6% in Jeddah. As regards unskilled jobs, At-Taif has 4.9% compared with 6.2% in

Jeddah.

TABLE 3.4

Monthly Income per Household in the Cities of
At-Taif, Makkah and Jeddah, 1971

City	£20 or less %	£21-40 %	£41-70 %	£70 and over %
At-Taif	15.7	28.2	26.7	29.4
Makkah	29.5	27.0	23.7	19.8
Jeddah	27.9	34.8	18.6	18.7

Source : Robert Matthew, Johnson-Marshall and Partners,
socio-economic survey of Western Province, 1971

In the city quarters, the differences between standards of living are clear. These start with the general appearance of the quarter and include the habitat and proceed to the dweller himself, etc. The situation, therefore, will be discussed in stages.

1. Generally speaking, the city can be divided into two contrasting easterly and westerly parts. The eastern part consists of quarters almost totally inhabited by a permanent population who own their dwellings. The dwellings are of native appearance, for instance they lack open spaces and have been built piecemeal in accordance with the availability of money. There is no sign at all of wealth or luxury in the annexed accommodation for servants' quarters or garages. The poor dwellings match the general appearance of the quarters with their unclean streets where greenery is absent (Plate 3.1). In complete contrast, the western part of the city has a different style of villa-like



Plate 3.1

"The poor dwellings match the general appearance of the quarters with their unclean streets where greenery is absent." Page 135

(Courtesy Town Planning Office, Jeddah)



Plate 3.2

"Extra cars are accommodated in specially provided tents." Page 136

buildings. These are surrounded by greenery and have annexed rooms for servants, and for garages. Extra cars are accommodated in specially provided tents (Plate 3.2). Clean asphalted streets with pavements and trees enrich the surroundings of these villas (Plate 3.3). Here, not every one is expected to own a villa. Furthermore, the western part, and in particular Al-Khalidiyah quarter, are virtually 'dead' out of the summer season, as they are then only inhabited by keepers and gardeners.

2. The different standards of living mean different backgrounds, and a different way of life. This differentiation may be manifest in a small way, from, for example, placing no barbed wire to protect plants and flowers on roundabouts (Plate 3.4, compare it with Plate 2.6, Chapter 2), to something as important as crime statistics. The absence of barbed wire may reflect certain types of behaviour and values. As regards crime rates, it appears from Table 3.5 below that the two selected quarters have contrasting records. Ash-Sharqiyah, which represents the eastern part, has a high number of various types of crime because of the fact that many workers, single people, immigrants, and people with low incomes and poor standards of education live there. On the other hand, Karwah, which represents the western part, has a better record, partly, however, because of the fact that some are not recorded because of position, honour and reputation of the people involved. But even if this is the case, there are still wide discrepancies between the totals. Density of population, however, is another related factor.

3. The distribution of the city sheep (5%) and goats (95%), which number 10,960 (1967)¹, is another factor which determines the

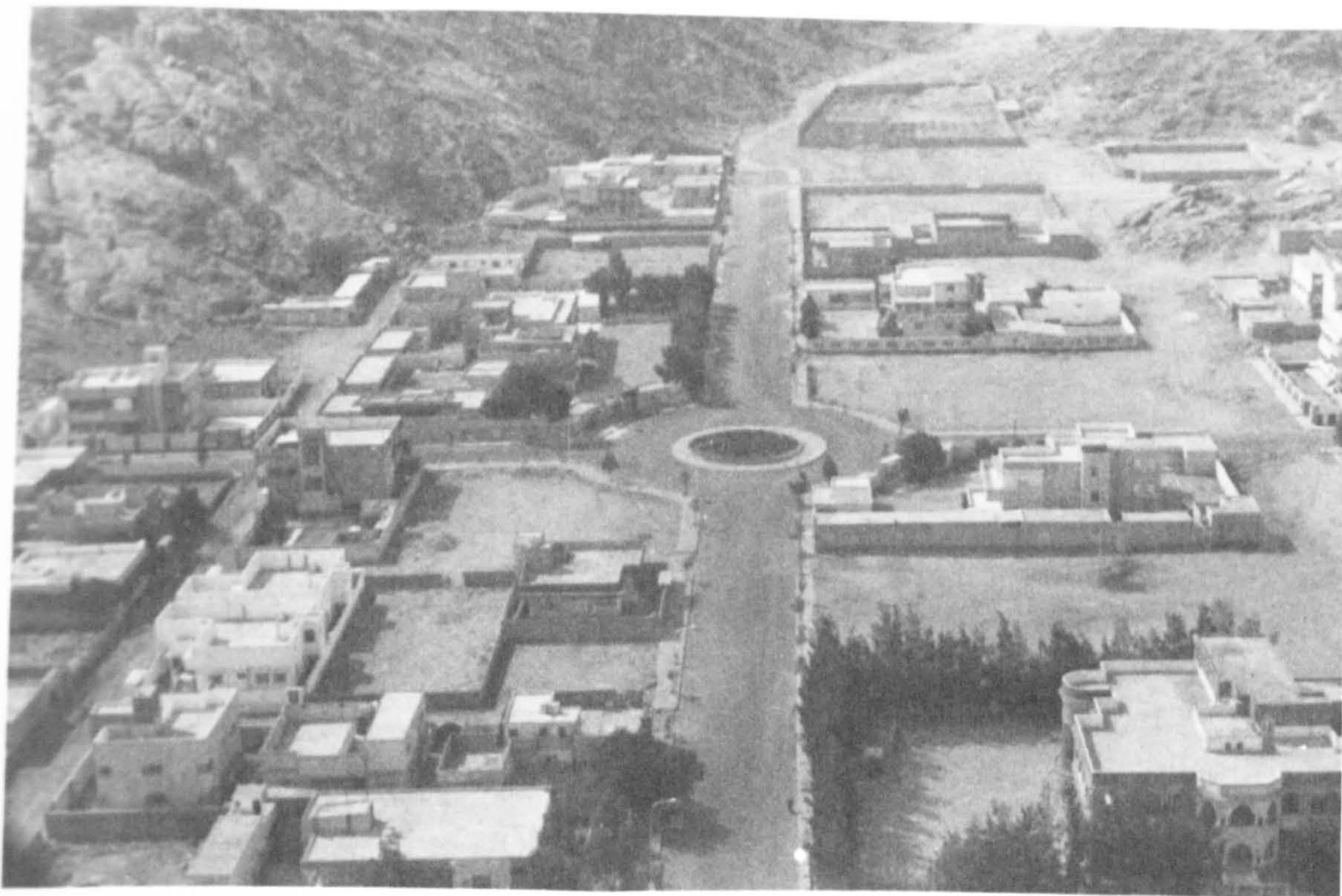


Plate 3.3

"Clean asphalted streets with pavements and trees enrich the surroundings of these villas." Page 136

(Courtesy Town Planning Office, Jeddah)



Plate 3.4

"This differentiation may be manifest in a small way, from, for example, placing no barbed wire to protect plants and flowers on roundabouts." Page 136 (compare it with plate 2.6, Chapter 2)

TABLE 3.5
Number of Crimes in Two Selected Quarters (Karwah and Ash-Sharqiyah) in the City of At-Taif

Year	Murder		Theft		Immorality		Quarrel		Alcohol		Drugs	
	Karwah	Ash-Sh	Karwah	Ash-Sh	Karwah	Ash-Sh	Karwah	Ash-Sh	Karwah	Ash-Sh	Karwah	Ash-Sh
1391 AH (26-2-71 to 15-2-72)	0	1	0	7	0	0	0	6	0	17	0	9
1392 AH (16-2-72 to 3-2-73)	0	0	0	15	1	3	2	5	0	45	0	9
1393 AH (6 months) (4-2-73 to 29-7-73)	0	0	1	3	0	3	0	3	1	11	0	3
TOTAL :	0	1	1	25	1	6	2	14	1	73	0	21

Source : Files of Crime Statistics Section, At-Taif Police

differences in standards of living. Their distribution is reflected by many factors, such as the inhabitants' origin. For example, immigrants from Russian and Chinese Turkestan keep no such animals, in comparison with those of Southern Yemen. For this reason, fewer are seen in Al-Bukhariyah sub-quarter than in BabAr-Ri sub-quarter. Also, stock-raising on this scale is related to the fact that many (as already stated) of the city inhabitants are of rural origin. However, it is true to say that the city core with surrounding quarters, in addition to parts further east, are common places for wandering flocks of goats (Plate 3.5). In the western part, on the other hand, this phenomenon is almost absent.

These animals are kept during the night in small sheds attached to buildings (Plate 3.6). This need has prompted local architects to reserve space underneath outdoor stairs for their accommodation (Plate 3.7). During day time, however, these animals are left to roam as scavengers in nearby streets by feeding themselves, more or less, on rubbish. Definitely, this food, in addition to their mixing with large numbers of streets dogs, affects the quality of the milk for which they are reared. Despite many warnings and even sometimes confiscation by the Municipality, these animals are still wandering freely. Local newspapers claim that the Municipality has not prohibited this because they believe the animals provide a service by consuming the city's litter and rubbish. This is not just the case at At-Taif alone, for almost all the country's urban areas are in a similar situation. For instance, Makkah and Jeddah had, respectively, 30,300 and 36,690 sheep and goats during late 1967.²

4. The fourth point to determine different standards of living



Plate 3.5

"However, it is true to say that the city core with surrounding quarters, in addition to parts further east, are common places for wandering flocks of goats." Page 138



Plate 3.6

"These animals are kept during the night in small sheds attached to buildings." Page 138



Plate 3.7

"This need has prompted local architects to reserve space underneath outdoor stairs for their accommodation." Page 138

is the telephone. Depending on the density of buildings and population, telephone cables were distributed among city quarters by Eppco, the foreign firm, in 1968-69. The first stage of installation was lengthened from May 1969 to the end of 1970. At the end, there were different degrees of response. Only 400 lines were used in Old Ash-Shohada and Ash-Sharqiyah quarters. There is a capacity, however, for 2,950 lines. For that, quarters such as Al-Khalidiyah have not benefited from the second stage of installation (1971-72) because all numbers were distributed in the first stage. Also, the pressure is related to the fact that many of the dwellers in this quarter have more than a line. In fact, as regards their importance, the company responsible at present (Sweedtel) has - as I have been told - no right to refuse this sort of demand. This would indicate that the dweller in the western part considers the telephone as 'daily bread'. Thus, lines tend to be heavily 'engaged', even with foreign calls. The opposite extreme is witnessed in the eastern part. Even if there is a telephone here, it is seldom used. Depending on 60 samples collected at random in selected quarters in August 1973, I encountered fascinating results. For example, there were on average 823 local calls per household during April-May-June of 1973 in the suq area, indicating the volume of business and trade. The Ash-Sharqiyah quarter householder has an average of 86 calls in three months compared with 436 calls for the As-Salamah quarter. The same is true for outside-city calls, as there are on average 26 calls for the suq area, seven for Ash-Sharqiyah, and 26 for As-Salamah.

5. Finally, data taken from social security files shows clearly that needy people concentrate in eastern quarters. From Table 3.6

It appears that Al-Khalidiyah quarter has no such class of person, while Shehar has only ten beneficiaries. In contrast, the two quarters of Old and New Ash-Shohada have a figure of 300, while the other three quarters have similarly high figures. It is pertinent to mention that the social security system applies to Saudis only. If, however, it applied to non-Saudis, figures for the eastern quarters could be at least doubled, as there are here hundreds of poor foreign shantymen (Plate 3.8).

TABLE 3.6

Number of Beneficiaries of the Social Security System in
Selected Quarters in the City of At-Taif, August 1971

Eastern Quarters	Nos	Western Quarters	Nos
Old and New Ash-Shohada	300	Karwah	47
Ash-Sharqiyah	169	As-Salamah	64
Shobra	295	Al-Khalidiyah	nil
Al-Faisaliyah	274	Shehar	10

Source : Files of Social Security, At-Taif Branch

Floating Population

Since the 'Days of Ignorance' (before the rise of Islam), confederacy (early C 7 AD)³ between the dominant tribes of At-Taif (Thakif) and Makkah (Koraish), At-Taif has become the only summer resort of the Makkans. Its agreeable climate, accompanied by its nearness to Makkah has maintained its importance to modern times. Furthermore, improvements in means of travel and communication, accompanied by a

rise in the standard of living, has encouraged distant peoples to visit it. From the official viewpoint, it is considered to be the summer capital of the country, as being the resort of the King, the Royal Cabinet, the Council of Ministers and the Ministers' Offices. Rumours which foresaw the end of these visits were based either on the widespread installation of central air-conditioning in Ar-Riyadh, the capital, or, possibly, the preference for the newly developing and more attractive south-west. These two rumours have been refuted because the Government has given a £7,000,000 contract towards the building of a permanent office complex to accommodate the officials.

In summer 1971, there were (according to Robert Matthew, Johnson-Marshall and Partners) 33,000 holidaymakers : 31% of the total population. They came mainly from Makkah (53%), followed by those from Ar-Riyadh (25%). Jeddah, which is on the Red Sea, is the origin of only 12%. Foreign holidaymakers are few : about 3%. The majority of them are Kuwaitis (1.7%). These are traditional Kuwaitis, attracted by a comfortable climate in a 'religious' society (no bars, nightclubs, etc.).

The result of being both a summer resort and summer capital is that two distinguished types of visitors are attracted. The first group comprises people who have come to complete business affairs, which need top Government officials' consideration. They soon leave when their business is completed. These visitors stay either in hotels or in the company of relatives or close friends. Accordingly, their contribution to the income of the city is limited. The second type of visitors are holidaymakers, who are mainly family groups. Their arrival and departure is largely controlled by the schools' final examinations, and the

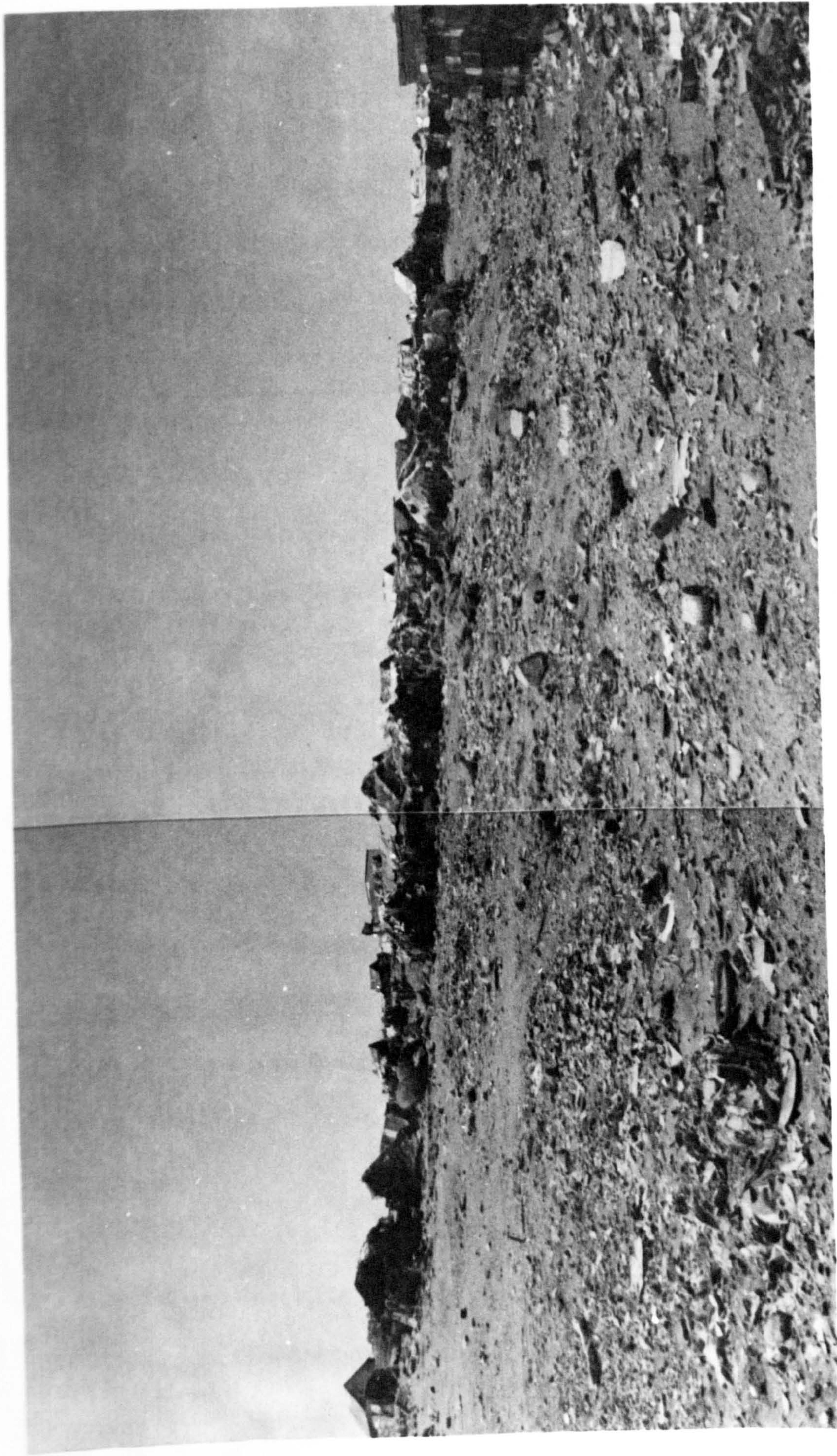


Plate 3.8

"If, however, it applied to non-Saudis, figures for the eastern quarters could be at least doubled, as there are here hundreds of poor foreign shantymen." Page 140

rise in the standard of living, has encouraged distant peoples to visit it. From the official viewpoint, it is considered to be the summer capital of the country, as being the resort of the King, the Royal Cabinet, the Council of Ministers and the Ministers' Offices. Rumours which foresaw the end of these visits were based either on the widespread installation of central air-conditioning in Ar-Riyadh, the capital, or, possibly, the preference for the newly developing and more attractive south-west. These two rumours have been refuted because the Government has given a £7,000,000 contract towards the building of a permanent office complex to accommodate the officials.

In summer 1971, there were (according to Robert Matthew, Johnson-Marshall and Partners) 33,000 holidaymakers : 31% of the total population. They came mainly from Makkah (53%), followed by those from Ar-Riyadh (25%). Jeddah, which is on the Red Sea, is the origin of only 12%. Foreign holidaymakers are few : about 3%. The majority of them are Kuwaitis (1.7%). These are traditional Kuwaitis, attracted by a comfortable climate in a 'religious' society (no bars, nightclubs, etc.).

The result of being both a summer resort and summer capital is that two distinguished types of visitors are attracted. The first group comprises people who have come to complete business affairs, which need top Government officials' consideration. They soon leave when their business is completed. These visitors stay either in hotels or in the company of relatives or close friends. Accordingly, their contribution to the income of the city is limited. The second type of visitors are holidaymakers, who are mainly family groups. Their arrival and departure is largely controlled by the schools' final examinations, and the

beginning of the next year's course. This means that the length of their stay is very similar : usually the whole vacation. In figures,⁴ 94.3% of the visitors in summer 1971 intended to stay during the whole season, 1.4% for the weekend and 4.3% for other periods.

More than one-third (35.9%) of these 33,000 summer visitors do not work during their visit. A further third (35.6%) work in the city during their visit. The main factor behind this rather high proportion is that the city acts as the country capital during this season. So, 50.0% of visiting householders are engaged in Government work (education not included), 5.1% work in transport and communication, and 13.0% in family services. As they are near to Makkah (88km), 25.0% of the summer visitors work outside At-Taif during their summer holidays. The rest (3.5%) have other arrangements. Thus, it would appear that there are three different types of visitors :

- 1) Those who work in or outside the city, or do not work at all, are considered to have above average incomes.

- 2) The second type are those engaged in services inside the residences of the first group.

- 3) The third type are workers with little income. They are mainly engaged in transport and distribution.

Accordingly, from Table 3.7 below, it appears that the visiting householder, on average, has a higher monthly income in comparison with the permanent householder (see also Table 3.4). For example, 43.9% of the permanent householders of At-Taif earn £40 or less per month, compared with 36.0% of the visiting householders. In other words, 56.1% of the permanent householders of At-Taif earn £41 or

more, compared with 64.0% of the visiting householders.

TABLE 3.7
Monthly Income per Household of 'Floating' Population
in the City of At-Taif,
Summer 1971

Income	Percentage
£ 40 or less	36.0
£ 41 - 100	37.7
£101 - 200	20.4
£201 or more	5.9

Source : Robert Matthew, Johnson-Marshall and
partners, Socio-economic survey of
Western Province, 1971

As far as their residence are concerned, 21.6% of the At-Taif city 'floating' population own their summer residences. Almost all these residences are closed for the rest of the year, in addition to a further proportion of houses, built largely for summer use. Many property owners 'kill two birds with one stone' by renting the dwelling to holiday-makers during summer time, and to foreign teachers during the rest of the year. However, 2.5% have no rent to pay, as they settle with relatives or close friends. Accordingly, 74.3% of the summer visitors occupy rented accommodation which belongs mainly to the permanent population of At-Taif city. The remaining 1.7% have types other than these three mentioned above. Since 74.3% of the 'floating' population rent accommodation, the amount of business the property owners handle during visiting season is considerable. The comparatively high number of

estate agents reflects this feature (27 offices during 10th October 1967 to 18th November 1967).⁵

As regards the type of residence, 49.0% of summer visitors prefer apartments because of their moderate rents. They are also preferred because of their nearness to the core. The second largest proportion (49.8%) live in houses; 44.4% share the house (only the entrance, stairs and roof) with other residents, while 5.4% have private houses. The rest (1.2%) live either in huts or have unspecified means of residence. In addition to this, other holidaymakers settle in nearby villages or in specially provided camp areas, such as Al-Hada (north-west of the city). The latter phenomenon has led to the fact that tents, originally kept for pilgrim use in holy places around Makkah, are transferred prior to each summer to At-Taif.

Another related feature is the absence of furnished accommodation. Holidaymakers (who own no residence) are obliged to bring their own furniture, mainly by means of lorries. It is a common sight to observe a family gathered on its luggage sitting on the back of the lorry. Holidaymakers may bring their goats with them (if they keep them) regardless of whether or not they own a residence. This obviously does not apply to those occupying apartments. In other words, there is a relationship between the size of the 'floating' population, and that of the number of sheep and goats.

Finally, all holidaymakers come to At-Taif city to enjoy its climate and the beauty of its countryside, but for no more. This summer resort has no special services or amenities. As a result of the rapidly changing way of life, tastes and values, people are beginning to demand more

than just climate and natural beauty. Extremists take the matter much further, so much so that it clashes with the country's religion and tradition. Thus, waves of holidaymakers leave the country to go abroad every summer. They go to Egypt and Lebanon, mainly in search of amusements which are unobtainable in Saudi Arabia. They are, generally speaking, either rich families, who think a place like At-Taif is below their standard, or single people seeking entertainment. There are, however, many ways to reduce the rate of this 'outflow'. The best way is to provide competitive summer resorts. Accordingly, much attention should be given to the general appearance of the settlement and, for instance, to its amusement parks. In fact, there are many things that At-Taif city lacks. There are two alternatives; either accept change and respond to it, or accept a sharp decline in the 'floating' population.

REFERENCES

1. Italconsult, Socio-economic and Urbanistic Survey of Jeddah - Mecca - Taif Area : 10th November to 4th December 1967, Rome, 1968
2. Ibid
3. Ibn Habeeb, Al-Monammaq fi Akhbar Koraish, Cairo, nd, p 280 (Arabic)
4. Robert Matthew, Johnson-Marshall and Partners, Socio-Economic Survey of Western Province, 1971
5. Central Department of Statistics, Ministry of Finance and National Economy, Census of the Establishments in the City of At-Taif, August-November 1967 (Arabic)

CHAPTER 4

IMMIGRANT POPULATION

Growth of the Immigrant Population

The immigrant population in the city of At-Taif should be considered as an important element in its demography. This importance is based on their high percentage of the total population, their remarkable contribution to and marked impact on the way of life. However, although this is the case, available data to support this are extremely scanty. For example, no material is available concerning their movement within Saudi Arabia, and the balance of international payments.

In 1962-63, the non-Saudis numbered 9,549 persons (20.0% of the city of At-Taif's total population). This was according to the census conducted by the Central Department of Statistics. Only about eight years later (1971) the consultant firm RMJMP* conducted the socio-economic survey of Western Province, Saudi Arabia. According to it, these people numbered 26,500 persons, or 25.0% of the total population. Thus, we can assume that between 1962 and 1963 and 1970 and 1971, the city of At-Taif had received, on average, some 2,119 immigrants yearly. In spite of this rather high percentage, the rate in the cities of Makkah and Jeddah exceeded that in At-Taif. For example, the percentage of non-Saudis in Makkah in 1962-63 and 1971 were, respectively, 25.5 and 26.6. Jeddah, on the other hand, shows higher percentages, with 53.1% and 42.1% of its total population classified as non-Saudis.

* Robert Matthew, Johnson-Marshall and Partners

These high proportions of non-Saudis will not decline so long as the country offers multiple-earning opportunities.

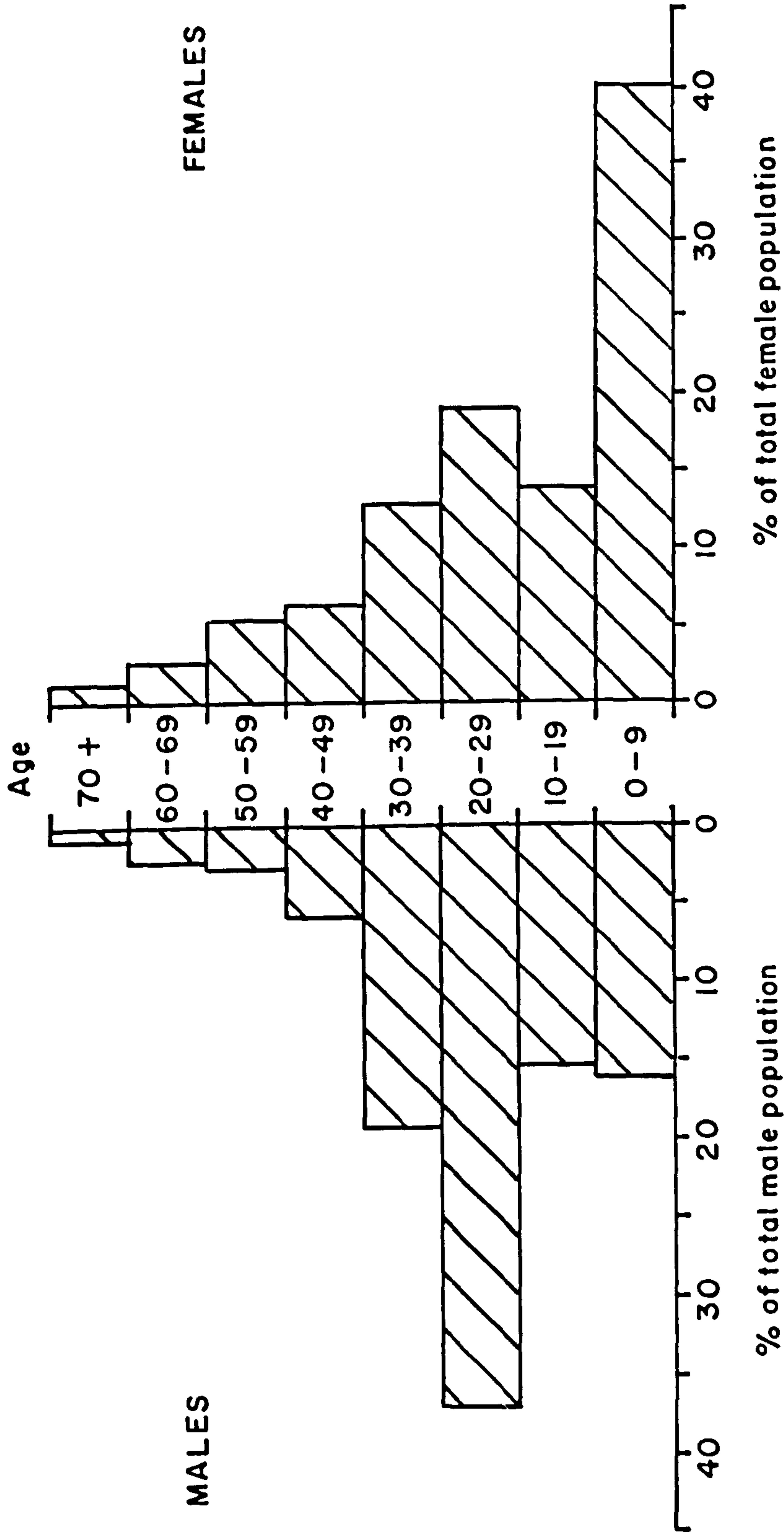
The Composition of the Immigrant Population

Apart from Asians and Africans, other immigrants have come mainly on their own, i.e., leaving their families behind. This feature, however, indicates that they do not intend to settle permanently, at least for the time being. Another feature is that the majority of these people are male, mostly in their twenties. This shows the desire behind their arrival is to earn money. These two features can be understood from Figure 4.1, showing the non-Saudi population age-sex pyramid of At-Taif city. Its data are furnished by the Central Department of Statistics official sample survey of 1966. This figure also shows an unusual feature. There are apparently 39.8% females and 16.2% males between the ages of 0-9. I attribute this, however, to either a possible fault in the data collection, or - since it is based on samples - to the fact that most interviewed cases happened to have more female children than male. Furthermore, interviewers would encounter far more young females than older females because the latter live in much greater seclusion.

It is possible to divide the immigrant population of the city of At-Taif into two major groups - old and new. The term 'old immigrants' used in the text applies to those who arrived before the present Saudi rule - i.e., before September 1924, the month At-Taif city came under Saudi dominion. They are, however, Indians, Ottoman Turks and Afghans. The second group, that is 'new immigrants', are divided further into two categories as regards the aim behind their movement to Saudi Arabia. Attention, however, is focused only on main immigrant communities (Russian and Chinese Turkestanis, Nigerians and Malis,

AGE-SEX PYRAMID OF NON-SAUDI POPULATION IN AT TAIF CITY
(source of data: 1966 Official Sample Survey)

Fig 4:1



Southern Yemenis and Yemenis), as the city of At-Taif (because of its nearness to the pilgrimage sacred places, which include the city of Makkah) probably has at least one sample of every Moslem community on earth (see Chapter 9).

1. Indians

Indians are believed to be the oldest foreign inhabitants of the city of At-Taif. For example, J Burckhardt, who was there in 1814, said that, "The far greater part of foreigners are Indians by origin."¹ From the surnames of the few for whom it is possible to trace their origin, it appears that they originated from northern India. The present generation of these people - apart from those who have clear surnames - have hardly any distinctive foreign characteristics. Many present famous and respectable families in the city are the descendants of these immigrants. They still live in their ancestors' dwellings which are concentrated in the Fooq quarter. However, although there has been no noticeable immigration of new Indians, the Amirate tribesmen still call all immigrants Honood, i.e., Indians. Thus, the tribesmen are actually referring to the Indian settlers of centuries ago, who were known to them as medicine suppliers, perfumers and as itinerant merchants.

2. Ottoman Turks

The Ottoman Turks can also be classified as old foreign settlers. Their numbers are influenced by the Ottoman dominance over Al-Hijaz. Accordingly, a few of them remained behind when its dominance was ended by the First World War. The present generation of these people still live in their ancestors' quarters : As-Salamah and Karwah. These two quarters were, then, outside the city wall. Only rich people

with either means of protection such as armed guards, or esteem and respect have managed to live in such unprotected places. The resultant phenomenon is that the Ottoman Turks were less integrated, for example through marriage, with the 'host' population in comparison with, for instance, the Indians. Different standards of living have also prevented such integration from taking place. Hence, most of their present ancestors can be distinguished by their fair skins in addition to surnames, if there are any.

3. Afghans

As far as the Afghans are concerned, they are known here as Solaimanis. Accordingly, they have given this name to their quarter : As-Solaimaniyah. There is, however, another As-Solaimaniyah quarter, but in Makkah. This repeated occurrence leads me to believe that the original quarter must have been at Makkah because these people immigrated first of all to Makkah, and then - as a second stage - to At-Taif. Nevertheless, it is difficult to distinguish the Solaimanis from the bulk of the population, apart from a token surname.

The 'new' waves of immigrants can be further subdivided into (a) those influenced by religious interest, and (b) those influenced by secular interest. The groups in the first category comprise:-

1. Russian Turkestanis

These immigrants are mainly from the Soviet Socialist Republics of Uzbekistan, Kazakhstan, Kirghizia and Tadzhikistan - all located in Central Asia. But, wherever they are from, they are known here as Bukharis - a word derived from Bukhara in the Uzbekistan SSR. This word even means to the Department of Passport and Nationality the

country of origin or the nationality of these people. However, events (the revolution of 1921-22 headed by Anver (Anwar) Pasha of Turkey; forming the Turkmenistan, Uzbekistan and Tadzhikistan Republics in 1924) in their homeland had forced them to emigrate.

Being Moslems, it is feasible to suggest that (a) the holy places in Al-Hijaz have attracted them, (b) and Saudi Government policy, which is based on Islamic laws and precepts, gives such people shelter. This can be understood from the absence of obstacles raised, which hence resulted in the arrival of more and more of them. This may be also related to the fact that early comers encouraged their brethren who remained behind to follow them. (c) Furthermore, the visit of the Saudi delegation headed by Prince Faisal (now King) to Moscow in 1932 perhaps meant further linkages. A few years later (1938), however, the relationship between the two Governments came to an end.

Accordingly, the rate of flow of pilgrims and immigrants from the USSR fell drastically. The few who arrived later on were mainly holders of Afghani or Pakistani passports.

However, it is impossible to show the rate of their immigration because of the absence of data. This is related, unfortunately, to the fact that no records of this sort are kept, particularly relating to the very early years of the present Saudi rule. Such a situation has been aided by these people themselves. Like other immigrants, it is unlikely to know the year of their arrival as well as other information because they want to forget and cut all sorts of ties concerning their origin or homeland. In other words, they do not want to be differentiated from wholly 'native' inhabitants. However, an estimate made by the

Department of Passport and Nationality in At-Taif city at the request of the writer, places the number of Bukharis living in At-Taif city (August 1971) at between 2,500 and 3,000. Most of these have already taken Saudi nationality, and there are only 500 Bukharis still with their original nationality. These 500 or so, however, are struggling to obtain a Saudi nationality : an indication of their desire to settle. But, since obtaining Saudi nationality is a slow and complicated business, only five of these people had managed to get it during the period from December 1971 to August 1973.

These people settled firstly in Makkah, but later on some shifted to At-Taif and others to Jeddah. Accordingly, there are Bukhari sub-quarters in Makkah, Jeddah and At-Taif. Their move out of Makkah is mainly related to economic reasons. However, there are other associated factors for their presence in At-Taif - for example the climate. Availability of land is another factor. When the Government distributed the plots bordering the city wall, from the east and south-east, in the early 1940's, few locals participated. The opportunity, however, was seized by these immigrants. This explains their presence in this single area. They soon organised themselves into groups to build on these plots. No professionals were employed. Thus, a simple house took about a fortnight to build.

Yet, strangely, they are divided among themselves. For example, the few Tadzhikistan immigrants form a separate community because of their distinct background and characteristics. Coming from famous, civilised cities, the people of Samarkand, Tashkent and Bukhara are more respectable than those from Andizhan, Margelan, Kokand or

Namangan.

Nevertheless, these people are receiving attention from the Government. The Government facilities provided are:-

- (a) that the Department of Passport and Nationality does not consult the Office of Labour when giving residency permits to them;
- (b) when applying for a residency permit, there is no need to present the original certificate of registration or the passport (any document will suffice);
- (c) their residency permit to be renewed every four years;
- (d) as Moslems who escaped to Saudi Arabia, as a result of persecution, they are exempt from the penalties which apply to other immigrants for not renewing their passports;
- (e) those who hold Pakistani or Afghani passports are considered as Bukharis, not Pakistanis or Afghans; and,
- (f) exempting those engaged in trade and business (residence before 29th July 1965) from the reach of Investment of Foreign Capital regulations. Accordingly, the bulk of these people work as tailors, clothiers, haberdashers, in leather and rubber works (Plate 4.1), or in running most of the city's hotels.

2. Chinese Turkestanis

These people are from Central Asia too. They originated from Sinkiang, formerly Chinese Turkestan. More precisely, they are mainly from Kashgar, Yarkand and Khotan. The most important event to drive

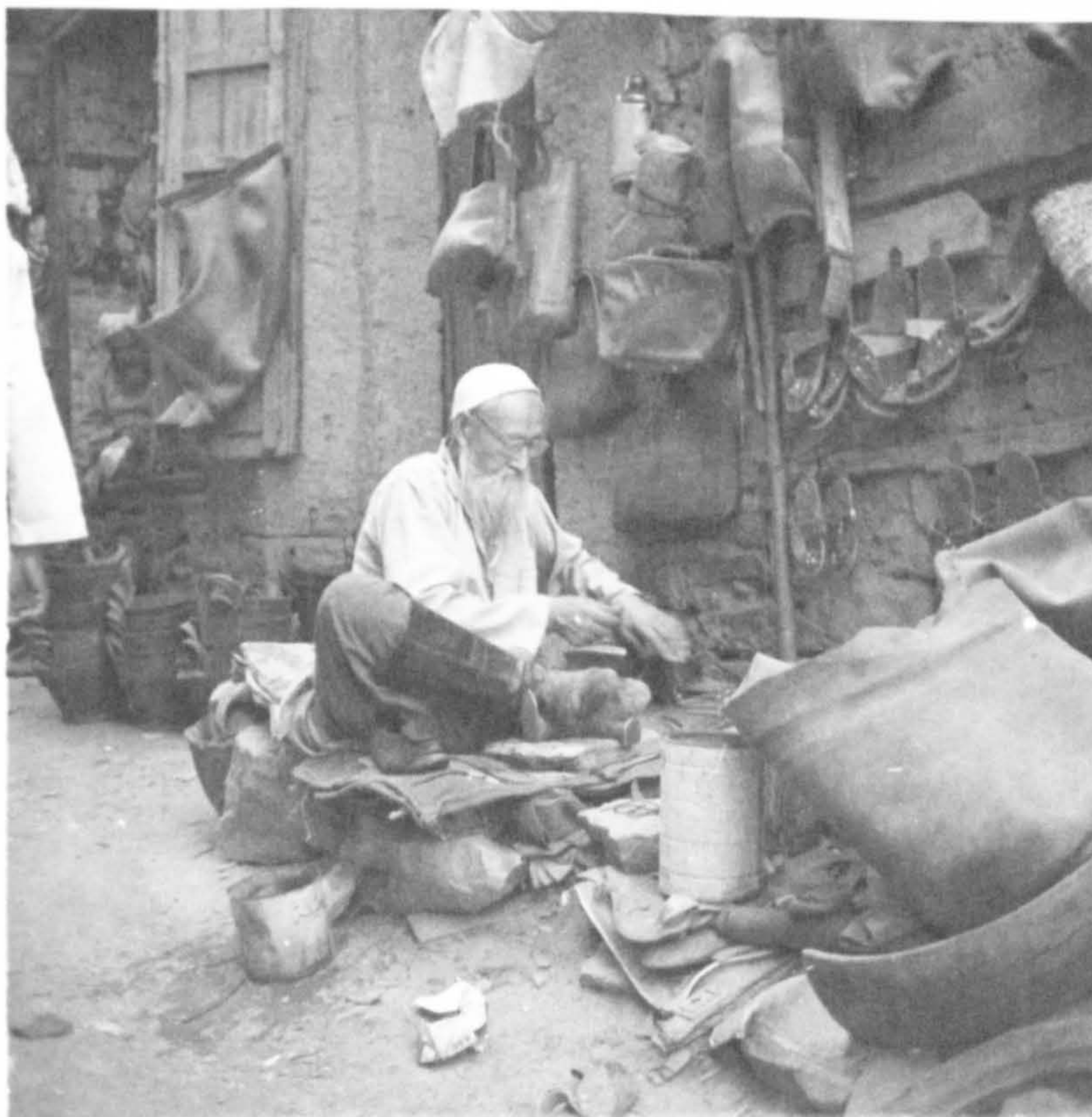


Plate 4.1

"Accordingly, the bulk of these people work . . .
in leather and rubber works . . . " Page 153

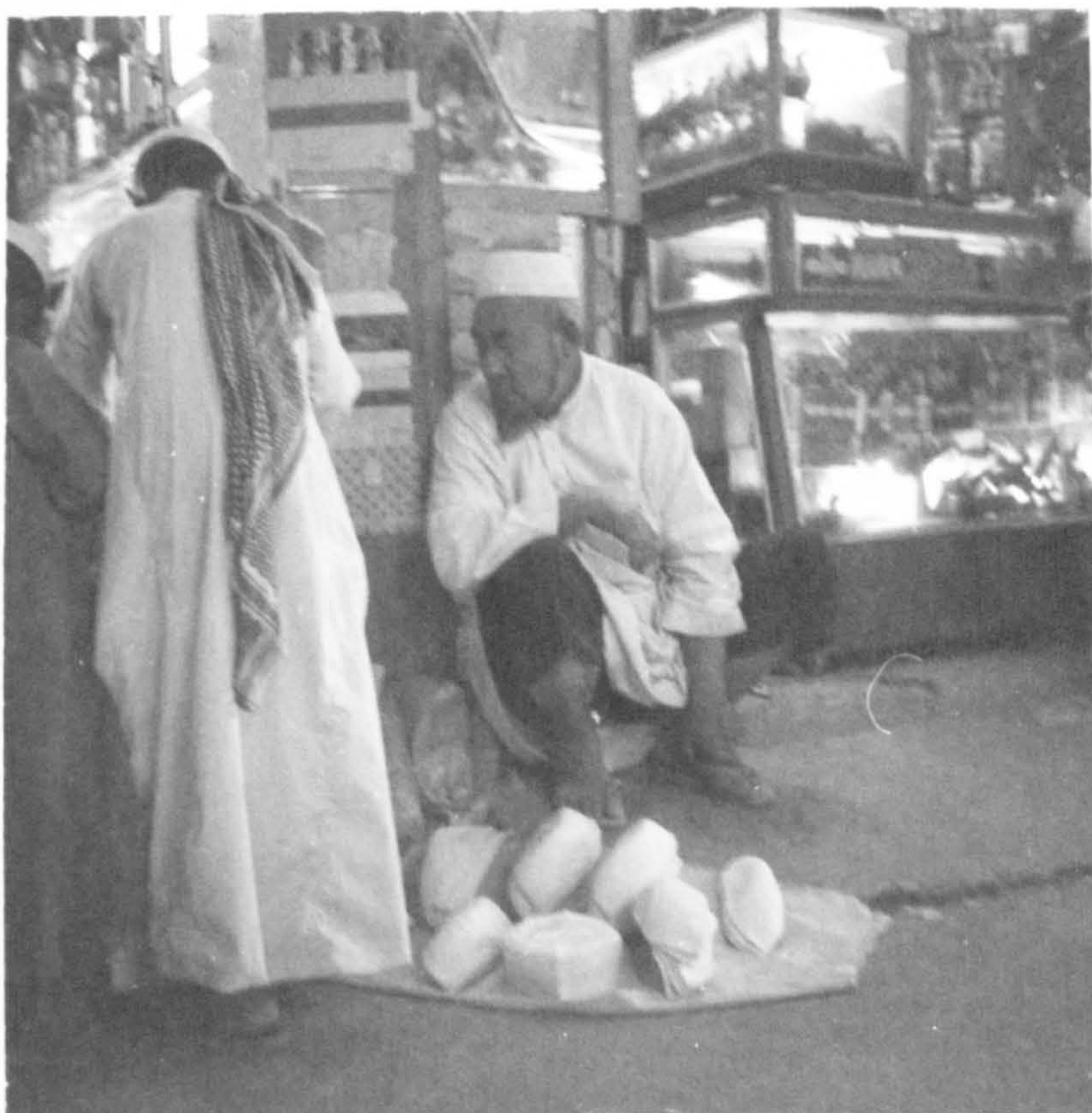


Plate 4.2

"As regards their means of earning, most of these
people work in their homes producing in particular
head-caps . . . " Page 154

them out of their homeland was their jihad, i.e., holy war, of 1928 headed by Ma Chung-Ying* against the Chinese authorities. However, they total about 350 in addition to over a hundred who have already taken out Saudi nationality. As there are no political relations between Saudi Arabia and Peking, the Taiwan Embassy in Jeddah is considered as their embassy. Existence of the embassy (unlike the Russian Turkestanis), plus care given to their brethren in Taiwan, means that these people do not have the facilities which are provided to the Russian Turkestanis. This does go some way towards explaining their low numbers.

These immigrants live in a separate community east of Al-Bukhariyah sub-quarter, and have few relations with them or any other group. However, they share a characteristic feature with the Bukharis, that their children who are actually born in At-Taif city, speak (in addition to Arabic) their own language. As regards their means of earning, most of these people work in their homes, producing in particular head-caps (Plate 4.2), while many of the younger generation work as pharmacists. Apart from their obvious surnames, immigrants from Russian and Chinese Turkestan can also be distinguished easily by their distinctive appearance. The older generation (who were mainly born outside Arabia) have the additional feature - they speak broken Arabic.

3. Nigerians and Malis

The majority of Africans living in At-Taif city originated in Nigeria and Mali. These people are known here as Takarna (Takronis),

* The name Ma stems directly from the first syllable of Prophet Mohammad. Forman, H, 'China's Moslemia', Canadian Geographical Journal, vol 37, no 3, September 1948, pp 134-143

which is derived from Takror : a large sect extends from western Sudan to Senegal,* regardless of their exact origins. Hausa is the chief category among these people, followed by Fellata (Fulani). Like the Russian and Chinese Turkestanis, these people came first of all to Makkah, and later on shifted to At-Taif. Accordingly, the largest numbers are at Makkah. However, the actual number of these people is not known to the Passport and Nationality Department, because most of them have no residency permits. They are, however, in the region of a thousand or more.

Living in groups diminishes some of their homesickness. The benefits they have, as well as compassionate treatment they generally receive from the 'host' population, makes their settling easier. Early settlers live mainly in the As-Salamah quarter in tin huts engulfed by cement block walls (Plate 4.3). The newcomers, on the other hand, live in more than 200 tin huts and some 60 straw huts in Wadi An-Naml : a sub-quarter of New Ash-Shohada (Plate 4.4). This is a temporary site, as the land is private property; their proposed residential location is to be on the Government-owned land, north-east of the city of At-Taif. This latter area, known as Saisad, will also accommodate other poor immigrants. The main factor underlying the large number of tin huts, and the small number of straw huts, is At-Taif's climate. Since it is cool, living in tin huts is comfortable, whereas straw huts are preferable in Makkah.

As regards their means of earning, generally speaking their women

* For details, see : Foodi, M bin (1780-1837), Infaq Al-Maisoor fi Tarikh Bilad At-Takroor, Cairo, 1964 (Arabic)



Plate 4.3

"Early settlers live mainly in As-Salamah quarter in tin huts engulfed by cement block walls."

Page 155

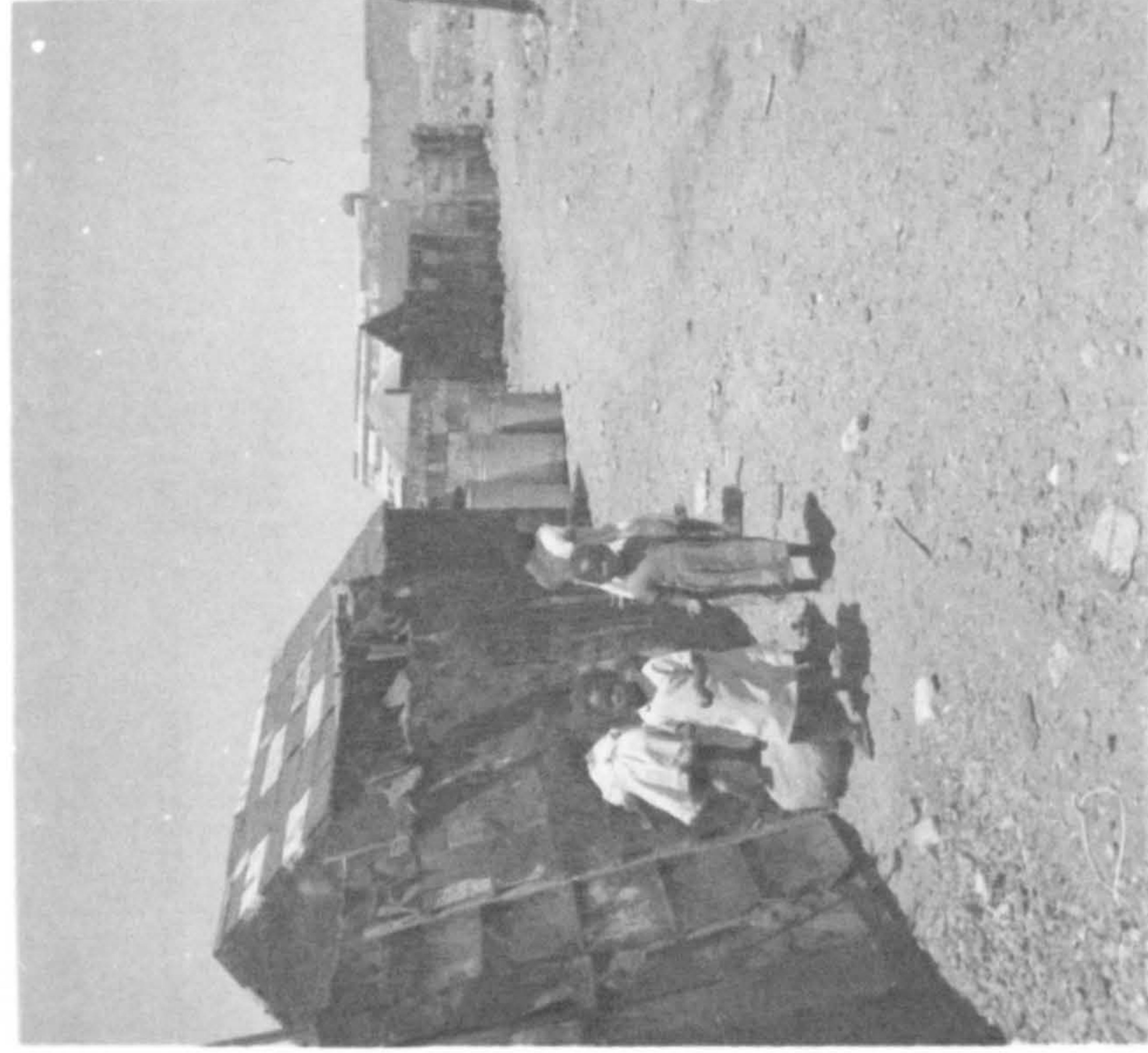


Plate 4.4

"The new-comers, on the other hand, live in more than 200 tin huts and some 60 straw huts in Wadi An-Naml : a sub-quarter of New Ash-Shohada."

Page 155

are nut-sellers (Plate 4.5), housemaids, pounders and grain cleaners, and dairy women, and they often perform these jobs while bearing their young on their backs. It is noticeable that the Fellata (Fulani) are more engaged with animal produce than the Hausa. Their men, on the other hand, work as carriers, car cleaners, drivers, mechanics, tin hut builders (Plate 4.6), dairy men and barbers (Plate 4.7). They are also involved with the making of social talismans, based on witchcraft; and also the production of maize wine (marisa).^{*} All these activities are illegal in Saudi Arabia.

At this point it is necessary to turn to second major group of new immigrants - those influenced by secular interests:-

1. Southern Yemenis

The Hadharim (Hadhramis) of Hadhramaut, now part of Southern Yemen, are the leading businessmen in At-Taif city and nearly every city and town in the country. These active tradesmen and businessmen number about two to three thousand in the city of At-Taif alone. They are usually grocers, clothiers, sellers of kitchen utensils and china, and bankers. They enjoy many facilities offered to them by the Saudi Government, such as giving their merchants as much freedom to trade as Saudis (circular no 4248, dated 6th June 1966, sent by the General Office, Council of Ministers' Presidency); and giving them a residency permit without consultation with the Office of Labour. The residency permit, however, must be renewed every four years for those who

* Maris is the name of an area in the Sudan and the people who live there. Al-Baghdadi, A (1162-1231 AD), The Eastern Key, being the English translation of Kitab Al-Ifadah wal Itibar, London, 1965

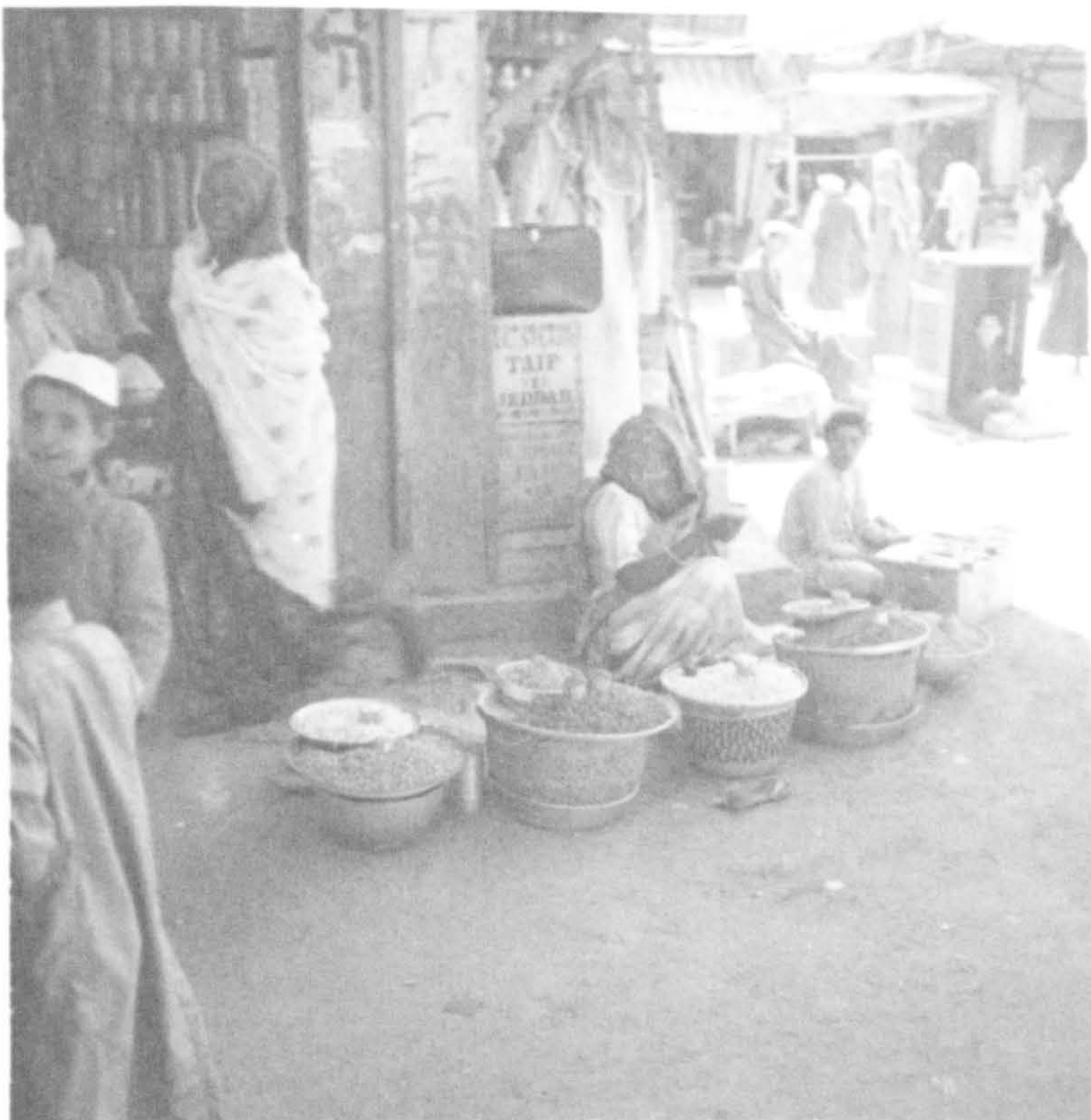


Plate 4.5

"Their women are nut-sellers," Page 156



Plate 4.6

"Their men, on the other hand, work as . . . tin hut builders," Page 156

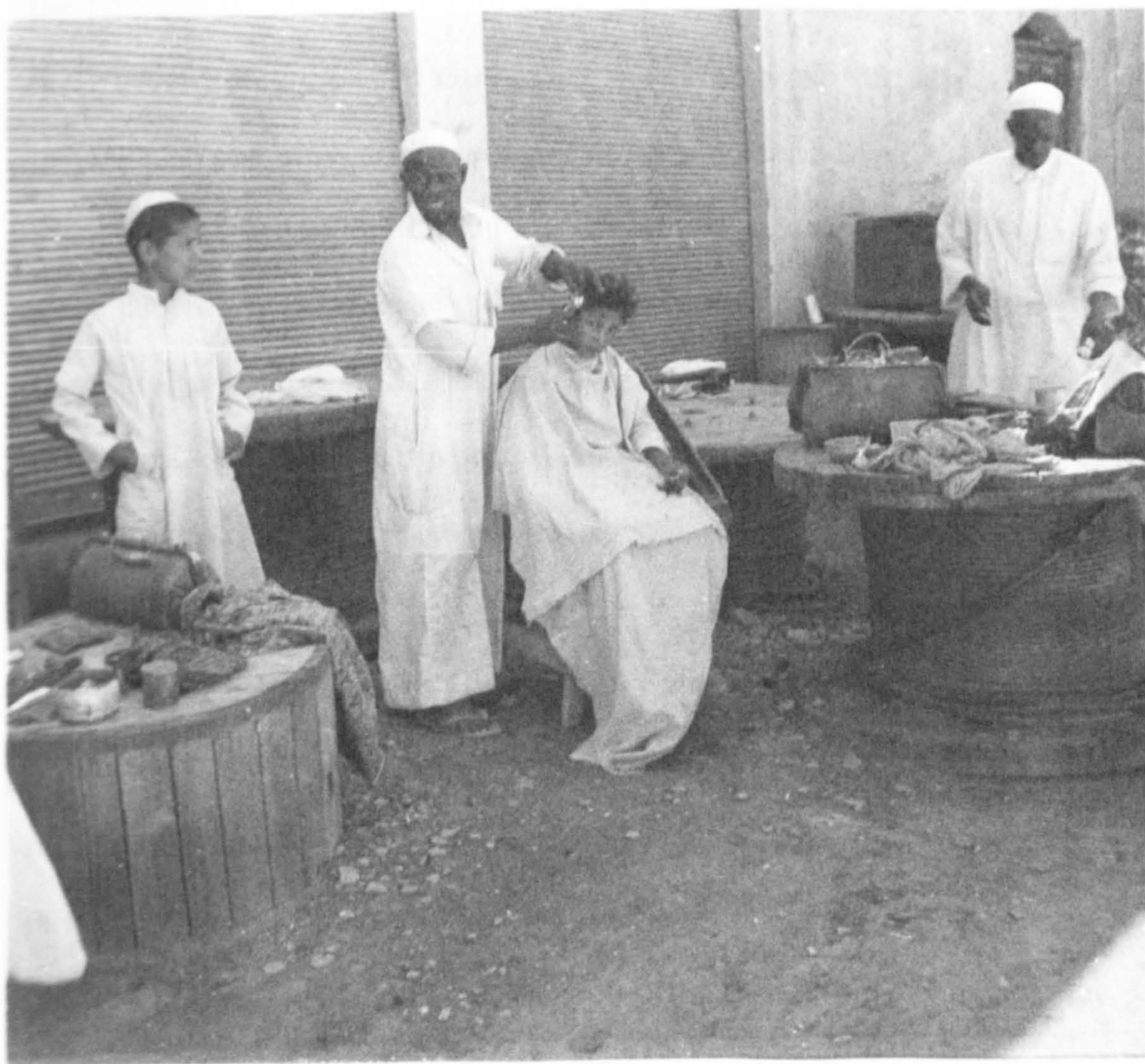


Plate 4.7

". . . and barbers." Page 156

arrived in Saudi Arabia before the 3rd October 1967.

A high proportion of these people have settled with their families. They are concentrated chiefly in the core of the city of At-Taif, i.e., within the suq, which is their 'natural' domain. Though mostly rich, the Hadhramis are renowned for their frugality in living. Accordingly, their residences, food and clothes are much below the standard of their incomes. Since almost all these people have come to Saudi Arabia for economic reasons, their thrifty life can be understood. Furthermore, these people are considered to be the immigrants most interested in keeping sheep and goats. Finally, though their homeland is a reservoir of migrants, few have taken out a Saudi nationality : four only during the two years July 1971 to August 1973.

2. The Yemenis

Beyond doubt, the facilities given by the Government to these immigrants, the treatment they receive, the benefits they have and the similarity which At-Taif bears to their homeland, has encouraged them to immigrate in large numbers. Before the ending of the poor relations (caused by the Yemen War) between the two countries, there were many obstacles facing these immigrants. For instance, the immigrant had to pay £4 dues and had to be sponsored by a reputable and well-known person. Today, such restrictions do not exist. Moreover, the Department of Passport and Nationality does not consult the Office of Labour about giving a residency permit to a Yemeni. His residency permit is due for renewal every four years. The assistance has even reached their pilgrims, as they are exempted from Pilgrims Guides Dues. For comparison : there were only 400 residency permits issued to

immigrants from the Yemen during the period of March to June 1971; this number rose to 11,719 residency permits issued from July to December 1971. The following year (1972) there were 16,250 residency permits issued to Yemenis in the city of At-Taif. In addition to the Embassy in Jeddah, this number of Yemenis necessitated the establishment of a Consulate.

These people are engaged in every imaginable sort of activity - builders, water carriers (Plate 4.8), retailers, pedlars, carriers, servants, bakers, sellers of water for ablution (Plate 4.9), sweepers and washermen (Plate 4.10). Accordingly, At-Taif and nearly every city and town in the country suffered acutely from the shortage of labour when these immigrants left the country during the Yemen War. However, it could appear from the sorts of jobs mentioned above that these immigrants are mainly male. In figures, during the period of July 1971 to August 1973, the Department of Passport and Nationality in At-Taif city issued the following residency permits : 22,648 for males, and 188 for females. These 22,836 persons brought with them 160 children only. During the same period, three Yemenis in the city of At-Taif were awarded Saudi nationality. Yemenis, unlike Southern Yemenis, are not concentrated in one area within the city. In other words, they are widely scattered and are seen where cheap accommodation exists. They live together in groups known as ozbah. Finally, it should be noted that these Yemeni immigrants are from the Yemen highlands, and with few exceptions are not from Tihamah of the Yemen — reflecting similarity of climate conditions.

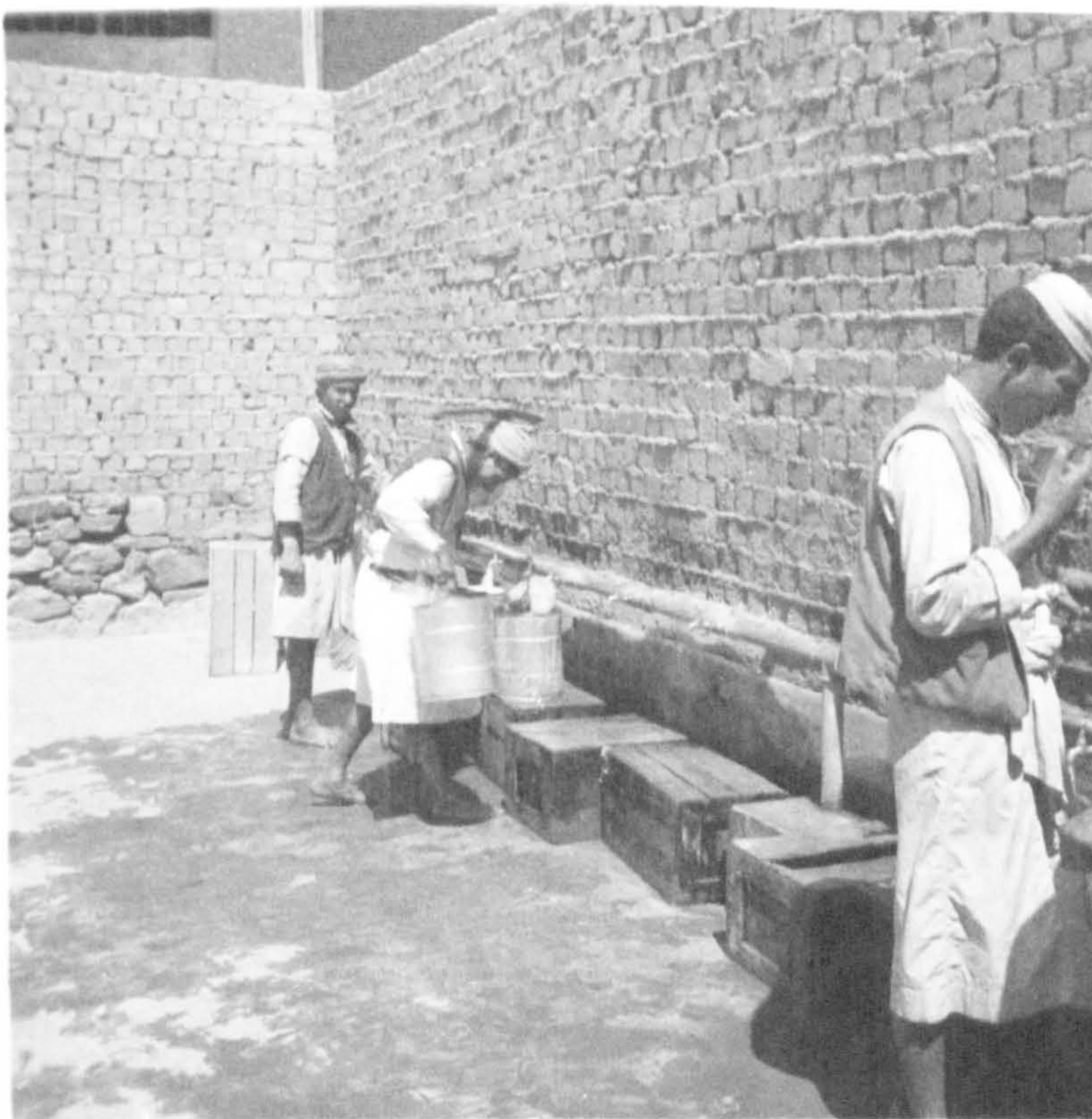


Plate 4.8

"These people are engaged in every imaginable sort of activity - water carriers, . . ." Page 158



Plate 4.9

". . . sellers of water for ablution, . . ." Page 158



Plate 4.10

". . . and washermen." Page 158

The Attraction of Immigrants to At-Taif City

Makkah, because it is close to every Moslem's heart, is considered an extremely attractive place. Every Moslem must (if he/she can afford) set out on the pilgrimage to Makkah. Since the rise and spread of Islam, it is common to see pilgrims of many different races and nationalities here. An additional common feature is that some pilgrims do not return to their places of origin. But - even so to a lesser extent - there are those who have come and settled for social and economic reasons, and others who have been brought against their will, i.e., slaves. The difficulties experienced in living in the unpleasant climate of Makkah eventually leads to the departure of some. Also, as its attraction diminishes (in time) settlers begin to look further afield.

In this situation, At-Taif comes into its own, and thus many foreigners come. As previously mentioned, the 'pull' factors of At-Taif city include an agreeable climate, abundance of water and greenery. Also, it possesses its own religious significance, for here lie buried the Prophet's cousin and some of his companions. Furthermore, even if they settle and obtain jobs in the city, Makkah is always near at hand.

This was the traditional situation but one which had changed to a considerable degree by the late 1940's. By then, Saudi Arabia (thanks to its oil fields) was growing richer - creating at the same time new jobs and businesses. Hence, waves of immigrants have been attracted, not necessarily for religious or social reasons, but more for economic reasons. A stream of foreigners appeared to fill skilled as well as unskilled posts for which there were no native applicants. Accordingly, there was no need for firm immigrations restrictions or nationality

offering. When education started to spread and natives became somewhat more capable of filling these jobs, attention became focused upon this situation. In other words, foreigners are now competing fiercely with natives in all fields of earnings. This can be illustrated, for example, by the following features:-

1. The percentage of non-Saudi establishments (commercial, industrial and services) in At-Taif city as well as other urban areas in Saudi Arabia is rather high. As indicated in Table 4.1, 15.0% of the public-owned establishments in the city of At-Taif are owned by immigrants. This is, however, the legal registered ownership, which is in fact below the real figure. Being a native myself, with many members of my family engaged in business, I know that there are many "completely Saudi" establishments that in reality belong to non-Saudis. The normal procedure in this respect is that foreigners 'buy' the name of a selected Saudi Arabian for cash or a fixed percentage of their profits. They, however, provide the capital and run the business. Hence, they are beyond the reach of Investment and Foreign Capital regulations.

2. When the number of employees in these establishments is shown by nationality, a striking feature appears. It is, simply, the high percentage of non-Saudis. According to the Census of Establishments which was conducted in 1967 by the Central Department of Statistics, the percentage of employed immigrants in these establishments is remarkable. The phenomenon is helped by the fact that immigrants accept lower wages than Saudi Arabians, and that Saudi Arabians themselves dislike manual employment. However, the number and percentage of Saudi and non-Saudi employees in the city of At-Taif as well as in

TABLE 4.1

Number and Percentage of Public-owned Establishments according to Type of Ownership

in Three Selected Cities, 1967

City	Completely Saudi %	Completely non-Saudi %	Joint/Unspecified %	Total
At-Taif	2,844 84.3	507 15.0	23 0.7	3,374
Makkah	5,690 82.9	1,154 16.8	16 0.2	6,860
Jeddah	5,376 65.0	2,798 33.8	95 1.2	8,269

Source : Census of Establishments of 1967, Central Department of Statistics, Ministry of Finance and National Economy

two other cities are indicated in Table 4.2 .

TABLE 4.2

Number and Percentage of Saudi and non-Saudi Employees
in Public-owned Establishments in Three Selected Cities, 1967

City	Saudi	%	non-Saudi	%	Total
At-Taif	3,206	55.8	2,537	44.2	5,743
Makkah	6,738	57.6	4,962	42.4	11,700
Jeddah	11,820	41.9	16,365	58.1	28,185

Source : Census of Establishments of 1967, Central Department
of Statistics, Ministry of Finance and National Economy

3. It should be noted that the majority of these immigrant employees are not classified as skilled or experts. In fact, they are engaged in every possible type of work. Such a noticeable feature has been proved by the data furnished by the Ministry of Labour and Social Affairs in 1968. As seen in Table 4.3, immigrants are even employed in easy occupations such as, for instance, washermen and waiters.

4. The former point can be established more firmly by pointing out the educational status/level of these immigrant employees. Out of the 3,343 non-Saudi employees in public-owned establishments in the city of At-Taif in 1968, there were 2,165 (64.8%) classified as illiterate compared with eight employees only (0.2%) who have a university degree. More details, however, are shown in Table 4.4. The missing qualification, unbelievably, is the vocational certificate.

TABLE 4.3

**Saudi and non-Saudi Manual Workers of Seven Selected Occupations
in At-Taif City, 1968**

Occupation	Saudi	%	non-Saudi	%	Total
Photographer	11	24.4	34	75.6	45
Cook	58	33.3	116	66.7	174
Walter	113	25.8	325	74.2	438
Washerman	nil	0.0	194	100.0	194
Barber	12	13.0	80	87.0	92
Baker	57	31.0	127	69.0	184
Those engaged in the manufacture of and laying of cement tiles (for paving floors)	5	1.3	376	98.7	381

Source : Census of Employees in public-owned establishments of 1968, Ministry of Labour and Social Affairs

TABLE 4.4

**Distribution of Saudi and non-Saudi Employees in At Taif City
Public-owned Establishments; by Educational Status/Level, 1968**

Educational Status/ Level	Saudi	%	non-Saudi	%	Total
Illiterate	1,780	45.1	2,165	54.9	3,945
Semi-literate	1,164	57.0	879	43.0	2,043
Primary certificate	349	62.9	206	37.1	555
Intermediate certificate	97	66.0	50	34.0	147
Secondary certificate	15	30.0	35	70.0	50
Graduate	nil	0.0	8	100.0	8

Source : Census of Employees in public owned establishments of 1968, Ministry of Labour and Social Affairs

The Influence of Immigrants on the 'Host' Population and the Government Response

Obviously, such a continuous out-flow of immigrants must have left many deep marks on the city of At-Taif 'host' population. This can be shown in the following points:-

1. The Arabic spoken by these different immigrant groups is noticeably interspersed with their native vocabulary. The significance of this is that the 'host' population now use these words in their everyday speech.

2. The dress, customs and even physical characteristics of the immigrants have had their effects on the natives, particularly as a result of intermarriage.

3. Food has also been another source of influence. For instance, Russian Turkestanis have brought a sort of bread known locally as tamees : temiz is a Turkish word meaning clean. The city of At-Taif had (1971) 68 tamees bakeries; compared with 26 local bread bakeries. As a matter of fact, this sort of bread has become the most popular, especially for breakfast, everywhere in Saudi Arabia. Another related effect is the distribution of different sorts of meat in the city meat markets.* This feature is caused by differences between people's origins among the city quarters. For example, no beef or camel meat is available in the Bukharis' meat market. This differentiation is caused also by internal (within Saudi Arabia) movement of people, as Ash-Shohada meat market offers one slaughtered camel a day compared with three in

* See Table 2.8, Chapter 2

Ash-Sharqiyah. Ash-Shohada is mostly inhabited by people from southern Al-Hijaz, while Ash-Sharqiyah is chiefly inhabited by people from Najd.*

But, despite the amount of assimilation, immigrants (particularly those intending to settle) are trying hard to sever ties with their homelands. They are forced to do so by the 'host' population, which has made them the target of continuous sarcasm. "Saudi by origin, grown-up and birth" is a difficult barrier to overcome before entering, for instance, the Army. Thus, it is very frequent that newspapers have advertisements for people who wish to change their 'token' names or surnames. This is, however, the first step towards 'erasing' their origins. Accordingly, they soon consider themselves pure natives and themselves classify new arrivals (even from their own former homelands) as immigrants. This feeling against one's foreign origin has been greatly increased by the remarkable recent rural-urban movement. In other words, out-lying tribesmen resent the immigrants' takeover of the business community, and the power that this takeover has given to them. This explains the low number of immigrants in rural and semi-nomadic areas, in the Amirate of At-Taif. According to the 1962-63 census, there were 152 non-Saudis in the rural area (0.6% of the rural population), and none in the semi-nomadic area. However, the situation is also related to the fact that these areas are areas where 'push' rather than 'pull' factors are operative.

At this rate, the last time the city of At-Taif witnessed a clear agglomeration of immigrant communities was during the period February

* See Table 6.1, Chapter 6

to March 1960. The so-called "social services and beautification" week,² which changed the appearance of the city, was greatly aided by the contribution of different communities. Groups of Hadhramis, Bukharis, Palestinians, Sudanese, Yemenis, Takronis accompanied by local migrant groups, such as Qaseemis (northern Najd), all participated (see Chapter 9).

The problem of immigration in Saudi Arabia has become so acute that to keep the country's doors open could lead to a loss of the nation's history, its customs, traditions, solidarity and even sovereignty. Thus barriers have been erected in order to control the situation. To clarify these, three different examples are set out below:-

1. It is against the law for pilgrims to remain in Saudi Arabia after their pilgrimage. They are further not allowed to enter into any employment, paid or unpaid. The yearly declaration of the Ministry of the Interior contains other restrictions, such as possible detention and the deportation of pilgrims who remain behind. The public are also warned of the "most severe punishments" if they become involved in harbouring such pilgrims.

2. The modified article 52 (November 1971) of the Immigration Act renders the offender who smuggles foreigners in or out of the country liable for a fine of up to £500, for the first offence.

3. The Department of Passport and Nationality should consult the Office of Labour about giving a residence permit to foreigners.

Nevertheless, there are, as appeared earlier, exceptional cases. They are, however, influenced by the country's Islamic policy which, as far as the present study is concerned, is beyond criticism.

REFERENCES

1. Burckhardt, J L, Travels in Arabia, vol 1, London, 1829, p 156
2. Al-Bilad Daily Newspaper of Jeddah, Nos 322, 323, 325, 326, 327, 328, 329 and 342, issued during February and March 1960 (Arabic)

CHAPTER 5

RURAL POPULATION

Saudi Arabia, Population Data

The population of Saudi Arabia can be divided into three categories: urban, rural and the nomads. Rural dwellers are those who are not classified as fully urban, or as tent dwellers. They are believed to comprise the largest category. The census of 1962-63, however, classified the population into two categories only: settlers and non-settlers. Accordingly, the rural population was combined with the urban population. Settlers, that is the rural and urban population, numbered 2,611,459 or 79.2% of the whole, while non-settlers, i.e. the nomads, numbered 686,198 or 20.8% of the total population. It is possible to state that rural population constituted a larger percentage than urban population in 1962-63, on the basis of the following points:-

1. The cities of Ar-Riyadh, Makkah, Jeddah, Al-Madinah, and At-Taif, which are considered to be the largest five cities in the country, have a population total of only 601,904.

2. In addition, Saudi Arabia has only six settlements with a population total of between 50,000 and 20,000 each.

3. Therefore, out of the total 6,112 settlements in the country, there were 5,276 settlements with a population of less than 500 each. These are rural settlements, as most of their inhabitants are employed in the agricultural sector.

4. The initial hypothesis is aided by the 1966 sample survey data, which support the belief that rural population predominates.

This survey, which was carried out by the Central Department of Statistics during April 1966, provides a more accurate breakdown of the population of Saudi Arabia. According to the survey, rural population comprises 52.2% of the total population (unfortunately, absolute figures are not available). Only 32.6% was then classified as urban population, and 15.2% were nomads.

It is my belief that the movement of rural population to urban areas, however, will eventually mean a decline in rural population. No data on a national scale are available to support this hypothesis, which is based largely on the continued expansion of shanty towns. The rate of rural migration to the cities of At-Taif, Makkah and Jeddah in 1966 and 1971 gives a clear indication of the claimed decrease in rural population. These ex-rural dwellers comprised the following percentages in these three cities. (Figures taken from Table 3.2, Chapter 3). However, it should be noted that these migrants were from the Asir and Western Province only.

						<u>1966</u>	<u>1971</u>
						%	%
At-Taif	..	..	..	..	..	8.6	28.6
Makkah	..	..	..	..	..	2.2	13.2
Jeddah	..	..	..	..	..	4.8	20.7

The Amirate of At-Taif, Population Data

As far as the Amirate of At-Taif is concerned, it is considered (apart from the city of At-Taif) to be a truly rural area. The Amirate of At-Taif forms the northern extremity of a thickly inhabited rural area,

rectangular in shape, which extends along the As-Sarah mountain range, southward to the border with the Yemen. But, amazingly enough, the actual number of rural dwellers in the Amirate of At-Taif is not known. The results of the first and only census to be held there (the 1962-63 census) were contradictory and suspicious on several counts.

1. The rural population of the Amirate totalled 25,244 persons in one section of the census book, and 25,294 persons in another section. This difference was caused by the dispute over the number of people at Wadi As-Sadad on the southern fringe of At-Taif city. On page 126 of the census book, there were 110 persons here, but on page 164 they numbered 160. Apparently, this was not a printing error, because each figure had been treated separately according to the census sections. Thus, the exact numbers of households, the numbers in each age group and sex ratios, were inevitably affected.

2. Age and sex ratios of the rural population are not accurately recorded. This is caused by combining their numbers with those of the 5,066 semi-nomads, who were attached to some of the rural settlements in the study area.

3. Rural dwellers were suspicious and ignorant of the census aims and targets. Enumerators were in a similar situation. For example, I have been told that a rumour of a possible tax in a given village inevitably would have affected the inhabitants' response. Therefore, the enumerators informed villagers that the aim behind data collection was to improve social security provision. The result was that each family divided itself into two or more. Evasive tricks, such as carrying a 'dressed' pillow as a baby, and pretending that the second door of a

habitat was the door of another family, have been discovered.

4. Under-enumeration of entire villages or parts of villages had also taken place. This is caused mainly by the absence of detailed maps and full lists of rural settlements.

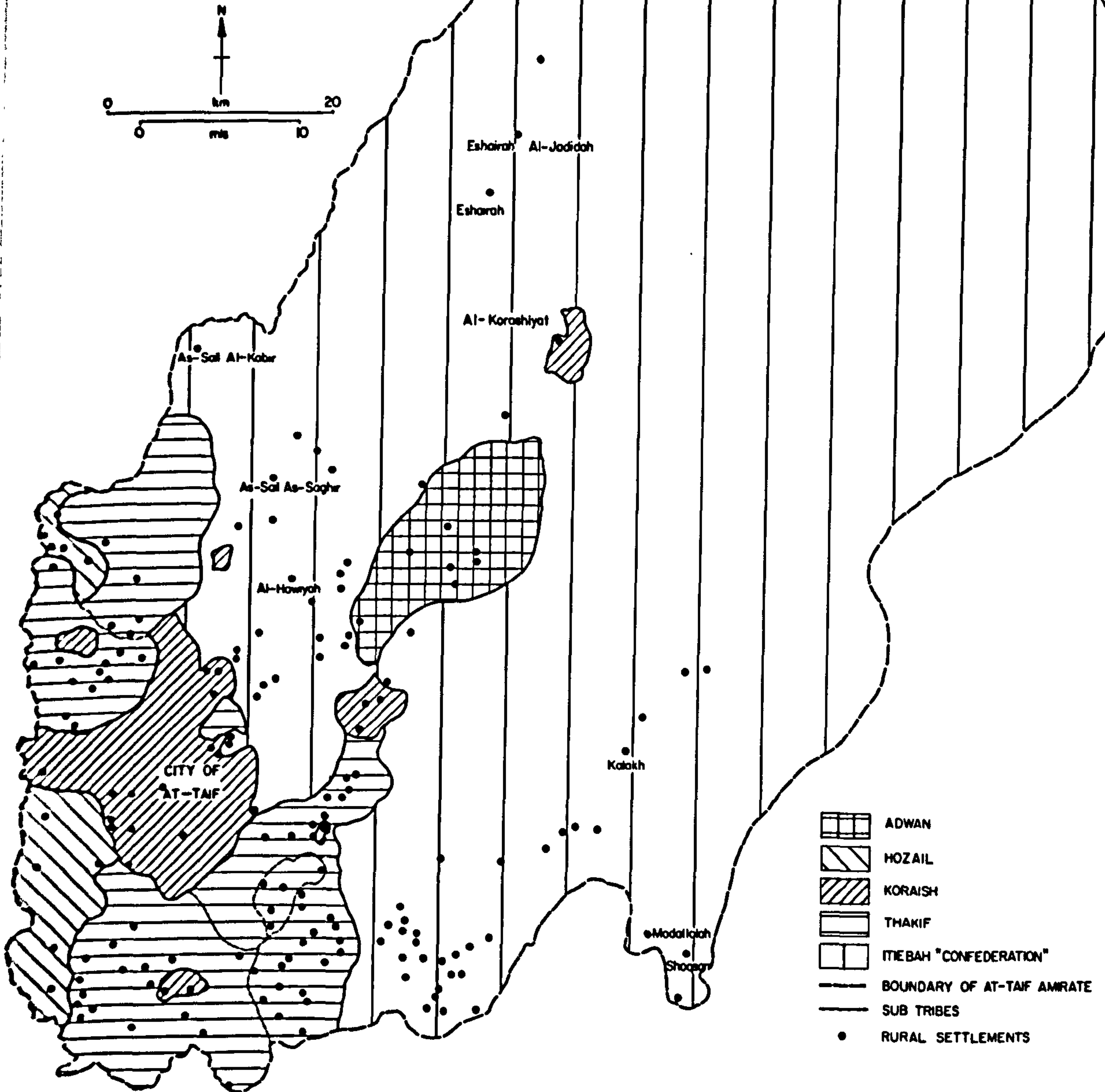
Origins of the Rural Population and Tribal Social Cohesion

The rural population of the study area is descended from five tribes : Adwan, Hozail, Itiebah, Koraish and Thakif (Fig 5.1). These tribes have either replaced vanished tribes, such as Bano Mihlaeel, or pushed out other tribes, such as Eyad. Accordingly, they settled here (after their migration from the south-west of the Arabian Peninsula) at various times. The earliest to settle, however, was Adwan, which settled here during the third century AD.¹

These five tribes are divided into about 15 main sub-tribes, and further into hundreds of clans. Each rural settlement contains, in most cases, one sub-tribe or one clan. At its head is the representative of the local authority, who is usually one of their leading members. For administrative purposes, then, the name of the clan or the sub-tribe has more significance than the name of the tribe. Little solidarity, however, exists among these people, and can be regarded as another factor to reduce the importance of the name of the tribe.

The breakdown of cohesion had reached such a state that members of one sub-tribe became allied with another sub-tribe, but from a different tribe. This has been the case in the tribes of Thakif and Koraish. In detail, Towaireq and Thamalah, the sub-tribes of Thakif, have allied with the tribe of Koraish against other sub-tribes of Thakif : Bani Sofyan,

**Fig 51 DISTRIBUTION OF TRIBES IN THE
AMIRATE OF AT TAIF**
(Based on the writer's fieldwork)



Bani-Salim, Al-Hemadah and An-Nomoor.² Alliance means a great deal. For instance, if rain has not fallen, and the inhabitants of a certain place have suffered, it is the responsibility of the allies to provide the victims with the following:-

1. They are to provide them initially with agricultural produce and to sell to the victims what is available from the harvest at low prices. Their herds are allowed to graze on the land of the host tribe.
2. The victims could be given the chance to cultivate in the host tribe's land. Two-thirds of their harvest will be given to them.
3. They might be allowed to work in the host tribe's agricultural land in return for fixed wages.

These customs are, however, declining, mainly because they have been replaced by Government assistance. This in turn has reduced the solidarity of these people.

Population Composition

A. Age Structure

The only data which exist as regards the composition of rural population are those of the 1962-63 census. Though they have many shortcomings, as they do not classify by age, sex or nationality, they provide, at least, the nearest possible picture of the situation in reality. However, the census shows that more than one-third of the rural population in the study area were infants (ten years old or less). These numbered 11,679 (38.5%) out of a total of 30,360 inhabitants. This phenomenon has already been noted in the context of urban population. It does indicate high fertility, which is, after all, a desirable feature, particu-

larly in rural societies such as these. It is also caused by early marriage (as low as 15 for boys and 13 for girls).

The second age-group in the census is that of 10-30 years. Clearly, this wide age-group contains infants (less than 14 years old), adolescents (14-19 years), and young adults (20-30 years). The group is rather too broad, then, for accurate interpretation. Even so, it has a smaller percentage of the total population than the first age group, 0-10 : only 31% (9,417 persons). This is clearly influenced by rural-urban migration. The same can be said about the third age-group : the 30-50 age-group. It contains 6,006 persons or 19.8% of the total population. The only difference between these two groups as regards the causes for their movement to urban areas is that most of the first group have been attracted by the availability of education facilities, whereas the second group has been attracted by the significant increase in urban employment.

The final group, however, is that of 50 years and over. It represents only 3,257 persons, or 10.7% of the total population. This low proportion of older adults and aged people is in complete contrast to, for instance, the Western world, where, particularly in rural areas, they contribute a much larger proportion of the total population. The low percentage of old people in the rural area of the Amirate of At-Taif is influenced by two major factors.

1. A high mortality rate caused by malnutrition and absence of thorough medical facilities. This statement is largely based on personal observation.

2. The fact that rural areas are desirable places for retired people is not the case here. Rural areas here are isolated places lacking

most services and amenities. Accordingly, they are areas of emigration rather than immigration.

The working population in such a youthful society is expected to be very small. As mentioned earlier, 38.5% of the total rural population of the Amirate of At-Taif are infants of ten years or less. They are clearly below working age and thus inactive, apart from very limited contributions such as providing water for household use (Plate 5.1). To these must be added students, aged people, and those few living from royalties. The majority of the rural population in the study area are in reality cultivators and graziers. The whole family must participate in the daily work, and thus, although they are unpaid, they are included (according to the United Nations) in the working population definition. Accordingly, the feature already observed in the urban population, whereby a large number of dependants is supported by a very small labour force, is not applicable here. Furthermore, the female population, in contrast to the situation in urban areas, is economically active. They too are seen in the fields or with herds (Plate 5.2). Unlike men, they spend their leisure hours spinning (Plate 5.3) - a well-established rural industry in the study area.

B. Sex Ratios

Little can be said about sex ratios in the Amirate of At-Taif because of the acute shortage of data. The census of 1962-63 gives only the numbers of males and females in rural settlements, regardless of their age. Furthermore, even these numbers do not represent rural population alone. In fact, they include - as in age structure - the semi-nomads (5,066 persons) who are attached to some of these rural settlements.



Plate 5.1

"They are clearly below working age and thus inactive, apart from very limited contributions such as providing water for household use."

Page 174

Near Al-Wahat settlement, south-west of At-Taif city



Plate 5.2

"Their women are seen with the herds." Page 174

Near the settlement of Al-Wahat, south-west of At-Taif city



Plate 5.3

"Unlike men, they spend their leisure hours spinning." Page 174

Accordingly, some caution must be exercised when considering these data. However, it would appear that both sexes are roughly balanced in numbers, as there were 15,540 males, or 51.3%, compared with 14,770 females, or 48.7% of the total. This shows an increase, though slight, of males over females : a phenomenon which was witnessed earlier in the case of urban population. Such an excess of males in a rural society raises many questions. Is it, for example, related to the belief that female mortality is higher than that of males? Or is it perhaps due to possible under-enumeration? Furthermore, why has male migration to urban areas not appreciably affected the sex ratios?

Returning to the census data, it appears that there are in the Amirate of At-Taif 37 rural settlements with an excess of females, 30 with an excess of males, and three settlements with similar ratios. This is in contrast to what was said earlier about the female rate in the rural area : 48.7%. The answer, however, lies in the population composition of the settlement of Al-Hawiyah, which has a majority of males (740 more than females). These are, however, mainly army and air-force personnel. Therefore, the overall situation gives the females a slight majority - an outcome of the observed migration of males to urban areas, in search of employment, or educational facilities. But even if it is the case, why then is there no marked female majority in rural settlements? Further investigation by the author showed that many married rural dwellers leave with their families, while single people return soon to marry, in most cases a waiting cousin. This phenomenon will continue, unless attitudes and values change. The present problem lies in the fact that there are no recorded cases of recent family migrations to urban areas

which have returned.

Standard of Living

Very little difference in standards of living were observed within the rural area of the Amirate of At-Taif, in contrast to the situation in the urban area. Such striking differences between the rural and urban areas are related, at least as far as the rural area is concerned, to the fact that the causative factors in the difference of standards of living are absent. For example, none of the high officials and top businessmen are to be seen here. Their absence is attributable to the poor provision of amenities and services in isolated rural areas. The few rich rural dwellers have recently worsened the situation, by too migrating to the urban area. By means of a questionnaire devised by the writer they were asked the causes for their departure, especially where there were no financial factors involved. Their replies emphasised the common belief that rural areas are backward and lonely, supporting a boring, unchanged way of life. Living there, according to them, is primitive. I believe, however, that there are two further motivating factors.

1. Continuous criticism by urban dwellers, who regard rural dwellers as backward 'bedouins'.

2. The attraction of the urban area for investing their money. But unfortunately the investment of rural migrants is channelled in one direction. Their main aim is to collect as much money as possible in the shortest time, using the easiest methods. The best means of doing so is (a) to buy plots of land and buildings, and (b) to engage in retail trade. Rural migrants associated with these activities have become

a common feature of urban life. This type of investment has little real benefit, even for the urban area itself. The rural investors, however, have followed the ways of the urban investors by placing little investment in, for example, industrial activity.

The profitable investments which the rural migrants gained have worsened the situation in the rural area. In other words, their rapid success has (a) tempted more rural dwellers to migrate to obtain similar advantages, and (b) urged the investors themselves to get rid of what they own in the rural area. This phenomenon is manifest in two forms - either the dwellers sell their property, or they simply leave. The latter action is attributable to the absence of buyers, or very cheap land prices. The situation, however, is ameliorated for those rural dwellers with land near the city of At-Taif, such as Oodah on its southern fringe (Plate 5.4). On the other hand, distant holdings are left deserted. This phenomenon is to be seen throughout the study area, for example around Wadi Masarra, north-west of At-Taif city (Plate 5.5). This neglect is worsened by urban dwellers who refuse to buy or invest in agricultural land. Their attitudes have been influenced by two factors: (a) a deep-rooted fear of possible loss, and (b) an absence of co-operation from the rural dwellers themselves.

Thus, the migration of rich rural dwellers, in addition to the scant attention paid to the rural area, the rich urban and rural dwellers have all played some part in making the bulk of rural dwellers poor. By means of a questionnaire, the monthly average income per household in the rural area of the Amirate of At-Taif was estimated at between £21 and £40. In comparison with the city of At-Taif, only



Plate 5.4

"The situation, however, is ameliorated for those rural dwellers with land near the city of At-Taif, such as Oodah on its southern fringe." Note the boundary posts which delimit plots for urban development, and the deserted well and pond

Page 177



Plate 5.5

"On the other hand, distant holdings are left deserted." The presence of a well and pond in the foreground indicates previous agricultural use

Page 177

28.2%* of its population receive an income of this kind. However, this is not the complete picture, for rural dwellers are mainly cultivators and graziers. A remarkable inconsistency of family income is observable, because these two means of earning are easily influenced by physical factors, for example an absence of rain; or social factors, such as the pilgrimage season, when demand increases for live animals. Hence, it is possible to distinguish a more wealthy group in the rural area - though it has few members. It constitutes, however, Government employees, mainly teachers. The bulk of Government employees in the rural area receive a regular monthly income of £40-£70. Other tiny groups may be added to them, such as those engaged in trade, transport and services.

Finally, one could add that the attitudes of the rural population can be considered as another factor underlying their low standard of living. They are, generally speaking, unwilling to work. Their reasoning is along the lines - why should we as long as we have a merciful God, and a rich Government? When they search for a job, they are looking for a non-manual one. Furthermore, to be a taxi or lorry driver is popular, but to be a barber or a waiter is not to be entertained, for these two jobs are below their dignity. As a result, working for the Government, the police force, and the army are the desired goals for everyone. All are viewed as easy jobs, with regular incomes. In addition, provision of education for rural dwellers can be held as a factor aggravating this situation. The education offered bears no relation whatsoever to the needs and demands of the rural area.

* Robert Matthew, Johnson-Marshall and Partners, Socio-economic survey of Western Province, 1971.

All the foregoing factors, then, make the rural area of At-Taif Amirate an isolated and backward one. The situation would be even more vivid if it could be supported with data. However, it appears that the differences in standards of living between the urban and rural areas will continue, as long as Government and public attention is directed to the urban area alone. As this is the case, prompt action to preserve and ameliorate the rural way of life must be taken, by, for example, retaining the population on the land, and attracting others to visit it or to settle. This could be achieved when the rural area is provided with amenities and services which will improve the quality of living. The relief (more than 1,000m in height) of the study area makes it an attractive place for winter and summer resorts. It offers rich natural scenery with high mountains, deep wadis, open plains (Plate 5.6), and a greatly varied flora. However, any project to develop the rural area should be thoroughly planned, as such projects must inevitably be planned from the beginning. The rural area lacks, for instance, electricity, municipal services, and good health services. Each doctor in the rural areas of the Western Province of Saudi Arabia has 20,000 patients compared with 2,599 patients³ in the six cities of the Western Province (Makkah, Al-Madinah, Jeddah, At-Taif, Yonbu and Tabouk).

Rural Settlement

Data Problems

The actual total of rural settlements in the Amirate of At-Taif is not known. According to the 1962-63 census, it numbers 70. In the official list of the Amirate of At-Taif, the number reached 400 towns



Plate 5.6

"The relief (more than one thousand metres in height) offers rich natural scenery with high mountains, deep wadis and open plains."

Page 179

(a) Jabrah, north-east of At-Taif city

(b) Wadi Jabajib, north-west of At-Taif city

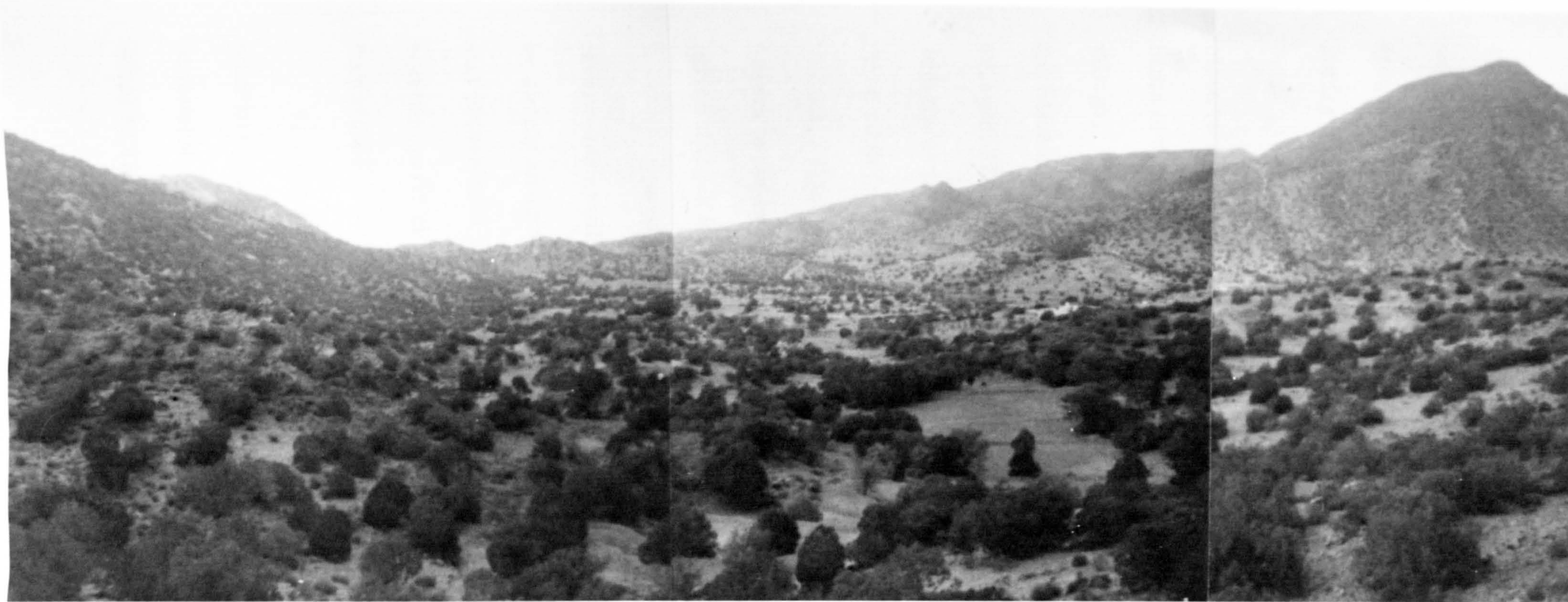


Plate 5.6 (continued)

(c) Ash-Shafa, south-west of At-Taif city

and villages in 1970.⁴ These differences are to be expected when dealing with an underdeveloped country, where absence or inaccuracy of data is frequently the case. However, the following facts, gathered by the writer during field work, tend to favour the latter estimate.

1. During data collection for the 1962-63 census, villages situated close to neighbouring villages were counted as one. In most cases the name of the passing-by wadi was given instead of the actual name of the village. Even clan-names were adopted when naming a village. In addition, the name of a main village was used to describe surrounding smaller villages. There is no precise settlement in the study area, for example, with the name of Bani Salim. Bani Salim is actually a wadi with 19 scattered settlements on its banks.

2. However, this is not the only case, for some places, such as Biqran in the extreme south-east corner of the study area, have had entire villages omitted.

3. The Amirate of At-Taif, on the other hand, classified isolated farmsteads as villages. Clearly, the names given to villages turn out to be simply an agricultural holding with annexed farmhouses. I encountered this phenomenon several times. 'Dead' villages in the eastern and northern parts of the study area turn out to be, in fact, deserted isolated farmsteads.

4. The absence of any effective classification for rural settlement has aggravated the situation. In other words, types of rural settlement, such as the hamlet, and isolated farmsteads, are all classified as villages.

Settlement Distribution

The distribution of rural settlement in the study area provides an excellent case study of an unbalanced regional settlement distribution. Settlement is concentrated in parts of the study area, while other parts remain totally or almost deserted. More accurately, rural settlements are concentrated either on the mountainous parts which surround the study area in the west, south-west and south, or on wadi banks. Incidentally, the city of At-Taif is situated on the banks of a wadi, at the foothills of the mountains. The northern and eastern parts of the study area have very few, widely scattered rural settlements (Fig 5.2). It is possible to view this uneven distribution of rural settlement as an interaction of the following factors:-

1. Rain is a vital factor. The mountainous parts receive the highest rainfall in the Amirate (Fig 1.6, Chapter 1).
2. Irrigation is also important, for settlements are scattered around wadi courses, where water can be expected, and where it may be easily extracted (Fig 5.2).
3. The third factor is economic in nature. Irrigated land supplies the population with agricultural produce.
4. The traditional ties of the people to the land reinforce the concentration of population in favourable areas.
5. Finally, mountainous parts have also provided protection for the inhabitants from outsiders and enemies (Fig 5.2 and Plate 5.7).

Settlement Size

As the 1962-63 census frequently counts nearby villages as one,

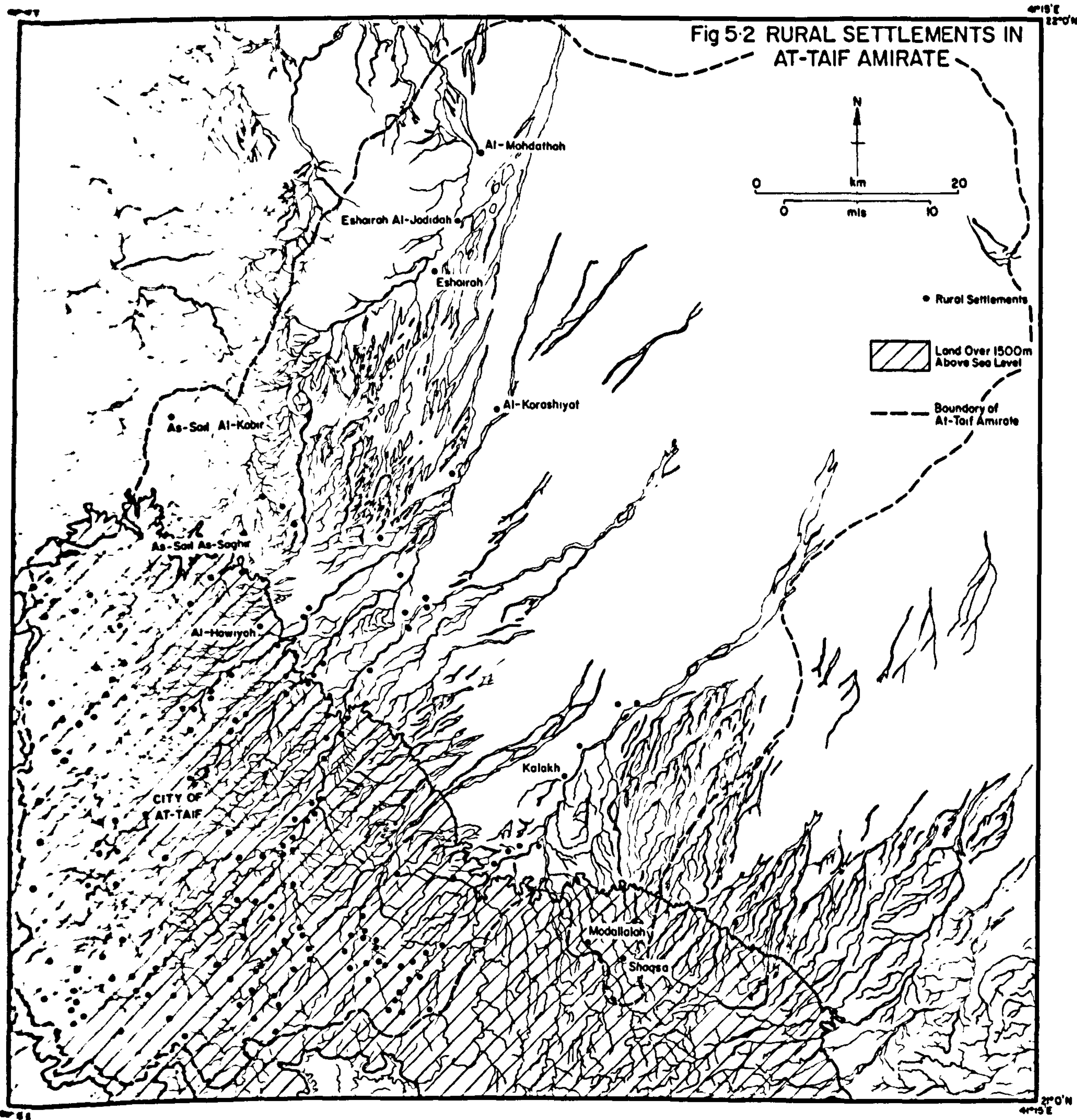


Fig 5.2 RURAL SETTLEMENTS IN AT-TAIF AMIRATE

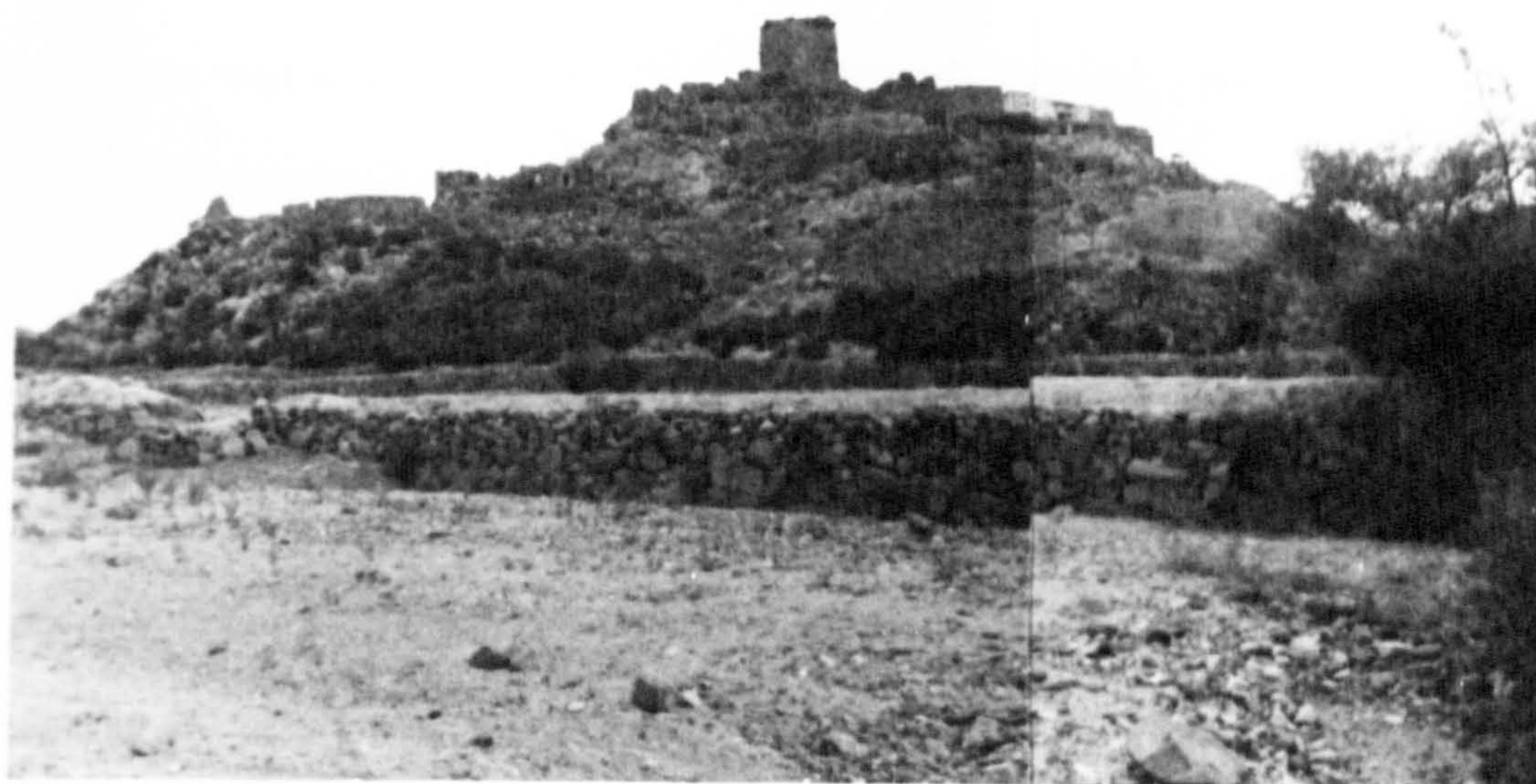


Plate 5.7

"Mountainous parts have also provided protection for the inhabitants from outsiders and enemies." Page 181

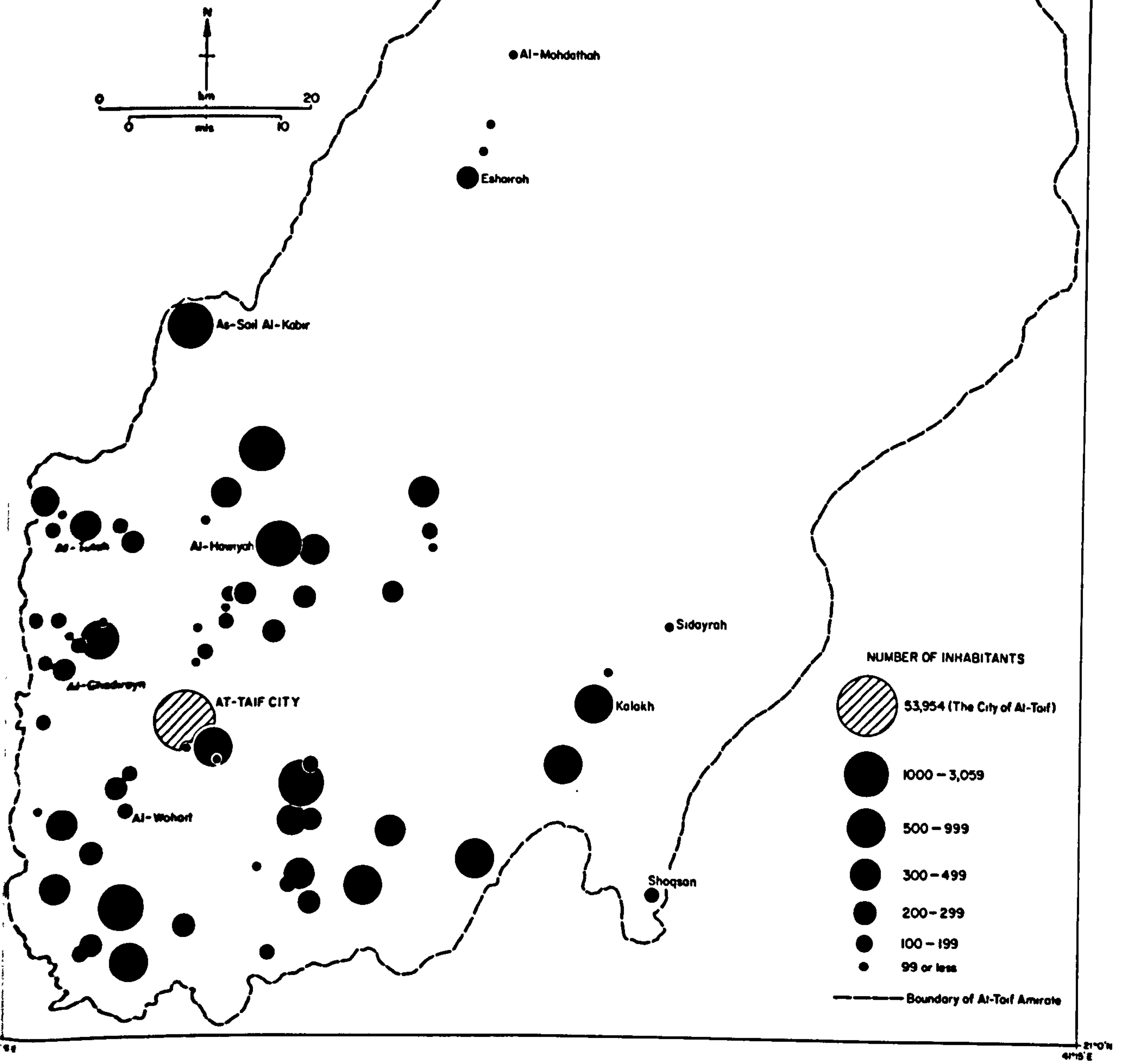
- (a) A settlement near Wadi Thamalah, south-east of At-Taif city
- (b) A settlement near Akrab, north-east of At-Taif city

and omits many others, any settlement size distribution based on this sort of data will not represent the actual situation in the study area. However, Figure 5.3 shows the population size distribution of rural settlements in the study area, in addition to the city of At-Taif, according to the 1962-63 census data. These figures should be treated with caution because of these limitations. Furthermore, absence of any other data prevents, for instance, the reconstruction of population distribution over time. However, the following points can be made on the basis of personal observation and investigation. These should produce a sufficiently reliable description of the population distribution.

1. The single urban settlement in the study area (the city of At-Taif) is by far the largest settlement. It is 18 times larger than the next settlement (Al-Hawiyah). Its population totals 53,954, whilst Al-Hawiyah has a total of 3,059 persons only. Surely, if the rank-size rule is applied (the inaccuracy of the 1962-63 census data has prevented such an application), the city of At-Taif would dominate the distribution. Its exceptional primacy separates it by a large gap from the second ranking settlement. Such a degree of primacy, however, is related to the fact that so much attention is focused, as was seen previously, on the urban area alone. This state of affairs will continue to increase the importance of the city and at the same time diminish the importance of the rural area.

2. The majority of rural settlements in the study area are small in size : most less than one thousand inhabitants each. There were only three settlements with a population total of over a thousand in 1962-63. These were the settlements of Al-Hawiyah, As-Sail Al-Kabir, and As-Sail As-Saghir. Each has, however, its own set of environmental

**Fig 53 SIZE OF RURAL SETTLEMENTS
IN THE AT-TAIF AMIRATE**
(Based on 1962-63 Census)



conditions determining its size. As far as Al-Hawiyah is concerned, the following factors have influenced its size. (a) The settlement is surrounded by fertile land, well supplied with water. (b) It is situated on the Trans Arabia Highway at a distance of some 21km from the city of At-Taif. (c) It is close to the only airport and airbase in the study area. (d) It is a summer resort for many members of the royal family (Plate 5.8). The settlement of Al-Hawiyah still retains its primacy over rural settlements. The other two settlements (As-Sail Al-Kabir and As-Sail As-Saghir) have lost their position, and accordingly their population total has decreased. This was influenced when the route of pilgrims and passengers (this was the sole factor behind the existence and expansion of these rest places) was changed. But settlements located on or near the new road (which runs through the escarpment) have witnessed observable increases in their population totals. The same can be said for settlements neighbouring the more recent road, which connects with the south.

3. The population total of the settlements of Shoqsan and Al-Mohdathah (in the extreme south-east and north of the study area) in comparison with the other settlements is worthy of attention. The first settlement, Shoqsan, has a population total of eight people only, while the total population of the latter settlement (Al-Mohdathah) is six. The existence of these isolated settlements is closely related to wells, which have become an attraction for the nearby semi-nomads. According to the 1962-63 census, there were 254 semi-nomads attached to the settlement of Shoqsan, and 636 semi-nomads attached to the settlement of Al-Mohdathah. However, if the 1962-63 census did include all rural



Plate 5.8

"Al-Hawiyah is a summer resort for many members of the royal family." Page 183

(Courtesy Town Planning Office, Jeddah)

settlements, regardless of their tiny size or remote location, small settlements similar to Shoqsan and Al-Mohdathah would be seen everywhere on the map.

4. Finally, it is possible to say that the western and southern parts of the study area, which are thickly inhabited, have smaller rural settlements. In contrast, the northern and eastern parts of the study area, which are less populous overall, have rather larger rural settlements. So, many rural settlements in the western and southern parts in the first instance are tiny and are situated close to each other. The contrast is seen in the northern and eastern parts, as distance between settlements increases, and their numbers also decrease. The amount of rain and the availability of underground water can be held as important factors for such differences.

Man - Settlement Relationship

Strong ties have developed through the ages between rural dwellers and their settlements. According to their belief, these settlements and the surrounding countryside are their own property, which they inherited from their ancestors. Therefore, the rural area has been divided extensively among them, into what are known locally as bolod, i.e., enclaves.* Each bilad, or enclave, belongs to a certain tribe or clan. Accordingly, the name of the enclave is derived from the name of the settled people. For example, we see bilad Bani Sofyan in Ash-Shafa,

* Bolod is a slang plural for bilad, i.e., enclave. This expression is also used for agricultural holdings.

south of At-Taif city, and bilad Adwan, north-east of At-Taif city. The frontiers between these enclaves have been fixed. Hence, any person - who does not belong to their bilad - is classified as a stranger. The so-called stranger has no right to cultivate, graze or cut wood.* Formerly (before the present Saudi rule), even to pass through their enclaves was regarded as trespassing.

The extent of sectarianism had reached, for example, the stage when Ath-Thibatah (a sub-tribe of Itiebah), which inhabits the settlement of As-Sail Al-Kabir, north of At-Taif city, was given a declaration in the early 1930's from the late King Abdel-Aziz. This stated that no strangers were allowed to own property or even trade in this territory. Only members of the sub-tribe could do this. Their complete monopoly of trade has enabled them to maintain high prices. The lack of competition has encouraged them even more. To stop this, in a polite but effective way, the Government has simply changed the route of pilgrims and passengers. This was the sole cause behind the construction of the costly road through the lofty escarpment to the west of the city of At-Taif. The result was that everything has now come to a standstill in As-Sail Al-Kabir. For example, by 1969, one-third (about a thousand) of its inhabitants had migrated. Its 24 coffee houses have closed down (there were 240 workers engaged in this service). Also, 34 shops, four bakeries, four butchers and three tyre repair shops have all closed down.⁵ This severe blow has changed their attitudes entirely. Largely because of

* The Government has nowadays its own idea as regards these matters. It is, however, beyond the scope of this study.

this change of attitude, an asphalted road to run through the settlement of As-Sail Al-Kabir is now under construction.

Therefore, unless the present Government is firm, no changes in the situation can be foreseen. This is also true for affairs such as the blood feud. Nowadays, most of these practices are disappearing. Social behaviour tends to be more governed by the individual himself, rather than by the group. This has been increased by the realisation that to be competent and intelligent matters much more in the 'markets' of the Government and the open-minded public, than lineage.

REFERENCES

1. Kamal, M S, Tribes of At-Taif, Al-Arab Magazine of Ar-Riyadh, vol 2, No 5, February 1968, pp 338-421 and 430 (Arabic)
2. Ibid
3. Robert Matthew, Johnson-Marshall and Partners, Regional Framework, Western Province Plan, 1971, p 133 (Arabic edition)
4. The Office of the Amirate of At-Taif, Names of Towns, Villages and Heads of Tribes, At-Taif City, 1970 (Arabic)
5. Data from : Ajlan, M D, The Change of the Makkah-At-Taif Road and its Effect on Nearby Settlements, BA dissertation, Department of Geography, University of Ar-Riyadh, 1969-70 (Arabic)

CHAPTER 6

NON-SEDENTARY POPULATION

Saudi Arabia, Population Data

Saudi Arabia is regarded as a natural home for nomads.

Nomadism can be regarded as a response to the climate, soils, terrain and vegetation of the country. For example, when the land has little to offer (such as minerals) and rain is scanty and erratic, there is no alternative to nomadism. Consequently, there is a common conviction in the country that nomads constitute a high percentage of the total population. However, when the 1962-63 census estimated that the percentage of nomads was only 20.8% (686,198 persons), a wave of protest, both from official and public sides, was launched against the low percentage reported. The people seriously believe that nomads must number at least half the total population. In 1966, an official sample survey was undertaken, and this too supported the previous census. According to it, the percentage of nomads in Saudi Arabia by April 1966 was only 15.2% of the total population (unfortunately, no absolute figures are available).

Their present ratio, however, is not known. The absence of accurate data means that all figures provided must be estimates, which may or may not approach the actual figure. In my opinion, they constitute approximately 10% of the total population. This estimate is based on the following factors:-

1. There has been a noticeable drift of nomads to urban life, as opposed to rural life. This hypothesis is based on the existence and

expansion of shanty towns surrounding urban areas.

2. Secondly, the recent sharp increase in size of the National Guard personnel, which is considered as their most attractive employment, is another pointer. Furthermore, the fact that nomadism is no longer a popular mode of life in Saudi Arabia has been a tributary factor.

3. The Government too is constantly planning to settle these people, and hence their numbers must be decreasing.

4. The attraction of urban life is considerable. Here the nomad can assure the future of his sons, and he and his family can enjoy living in a modern society with all the services and amenities never before experienced. He will no longer be labelled 'badawi' * - an insulting word given to nomads, used frequently in the urban area.

But even if we assume that their numbers are not falling off noticeably, they will continue to shrink in relation to the total population, especially as urban population continues to increase. Urban population is increasing in number constantly, by, for instance, migration from within and beyond the country, in addition to natural increase through improvement of medical services, and rise in standard of living.

The Amirate of At-Taif

Definition of Non-Sedentary Population

Two types of non-sedentary people can be distinguished in the Amirate of At-Taif. Both, however, are not completely nomadic

* The word 'badawi' applies also to rural dwellers as seen through the eyes of urban dwellers

I The first type is the semi-nomadic group who move 'horizontally' in search of pasture. They are to be found in the eastern and northern parts of the Amirate. However, they differ from the true nomads in a number of ways:-

1. They are not totally separated from rural and urban life. They frequently visit and camp around rural settlements and particularly the city of At-Taif, seeking, for instance, Government and medical services. Part-time work is also undertaken by this group. Their number increases in the summer time when, on the one hand, the amount of pasture declines, and, on the other, when work opportunities in the now crowded city of At-Taif become plentiful. Also, this part of the year is considered as a favourable time for their transactions. The demand for meat increases remarkably as a result of the presence of the King, the royal family, and the Government. Furthermore, the majority of families, both local and holidaymakers, choose this time of the year for their marriage ceremonies. At-Taif city, because of its pleasant climate, always takes the lion's share in this respect. Above all, marriage ceremonies in Saudi Arabia require meat in large quantities. One large marriage ceremony of a distinguished princess held in Al-Hawiyah (to the north-east of the city), on 15th to 17th August 1973, consumed more than 1,500 sheep. Complete absence of sheep in the city's livestock auction led the writer to investigate the reason for this thoroughly. The frequency of such wholesale deals for marriages has had two outcomes. The first is that the verb 'sweep' has replaced that of 'buy'. The second is that the sellers of the livestock - in addition to others - camp around the site of such a ceremony in order to get free food for themselves and their dependents.

Furthermore, to go for a picnic in the countryside - the desire of everyone at this time of the year - needs, above all, live animals. All these temporary customers, however, are supplied largely by the semi-nomads.

2. The range of their movement is relatively short : about 55 km in distance. Sheep rearing (not camel) is the predominant activity. In addition, these people rear goats and, surprisingly enough, hens. These are kept for trading purposes rather than consumption. It is impossible, however, for true nomads to rear poultry. Those who have hens keep a local type which is well adapted to the environmental aridity.

3. The widely scattered wells in the eastern and northern parts of the study area, one of which is Al-Mohdathah, together with the ain of Akrab (Plate 6.1) serve as rendezvous for these people. They visit them regularly, often weekly, to meet their water needs.

4. The nearness of the holy city of Makkah and the pilgrimage sacred places (where a heavy demand for live animals occurs each pilgrimage) * keeps them away from their land for about a month. Furthermore, the unlimited work opportunities furnished during the pilgrimage time can be regarded as a powerful attraction also.

II The second type of non-sedentary people in the study area are those who move 'vertically' or practise transhumance. They are to

* During the pilgrimage of 1974, a total of 840,000 head of camels, cattle, goats and sheep were sacrificed, of which only just over 200,000 were imported. Respectively from Okaz Daily Newspaper of Jeddah, no 3145, issued on 7th January 1975, page 8; and Al-Madinah Daily Newspaper of Jeddah, no 3259, issued on 29th December 1974, page 4 (Arabic)



Plate 6.1

"The ain of Akrab serves as a rendezvous for these people."

be seen in the mountains in the west and south-west of the study area. The range of their movement falls between the lowlands, known as Tihamah (outside the study area) and the mountains. Their movement is influenced by the following factors.

1. In the summer, Tihamah becomes increasingly hot and dry with a subsequent scarcity of pasture. The mountains, on the other hand, are more attractive. In the winter, they move back to Tihamah to escape the severe cold of the mountains. Some of them, however, practise 'dry farming' during this season. This activity will not be discussed at length because it takes place outside the study area.

2. Nevertheless, such movement has been aided by the fact that these people belong to tribes and sub-tribes (such as Koraish and Hozail) who own territory at the summit and foothills of the mountains. If this were not so, i.e., if the people of the mountains were not related to those of Tihamah, there would be no way for the movement to take place smoothly and peacefully.

Population Data and Distribution

Small numbers of semi-nomads are expected to be found in the study area. This is a result of the local environment which offers, in most of the study area, better opportunities for variable types of land-use than that of nomadism. Hence, there is no need to move from one place to another in search of pasture as long as the grazing land and water wells are adequate. Accordingly, semi-nomads are concentrated in the eastern and northern parts of the study area, which are less favourable. In addition, there are fewer numbers in the western and south-western

highlands.

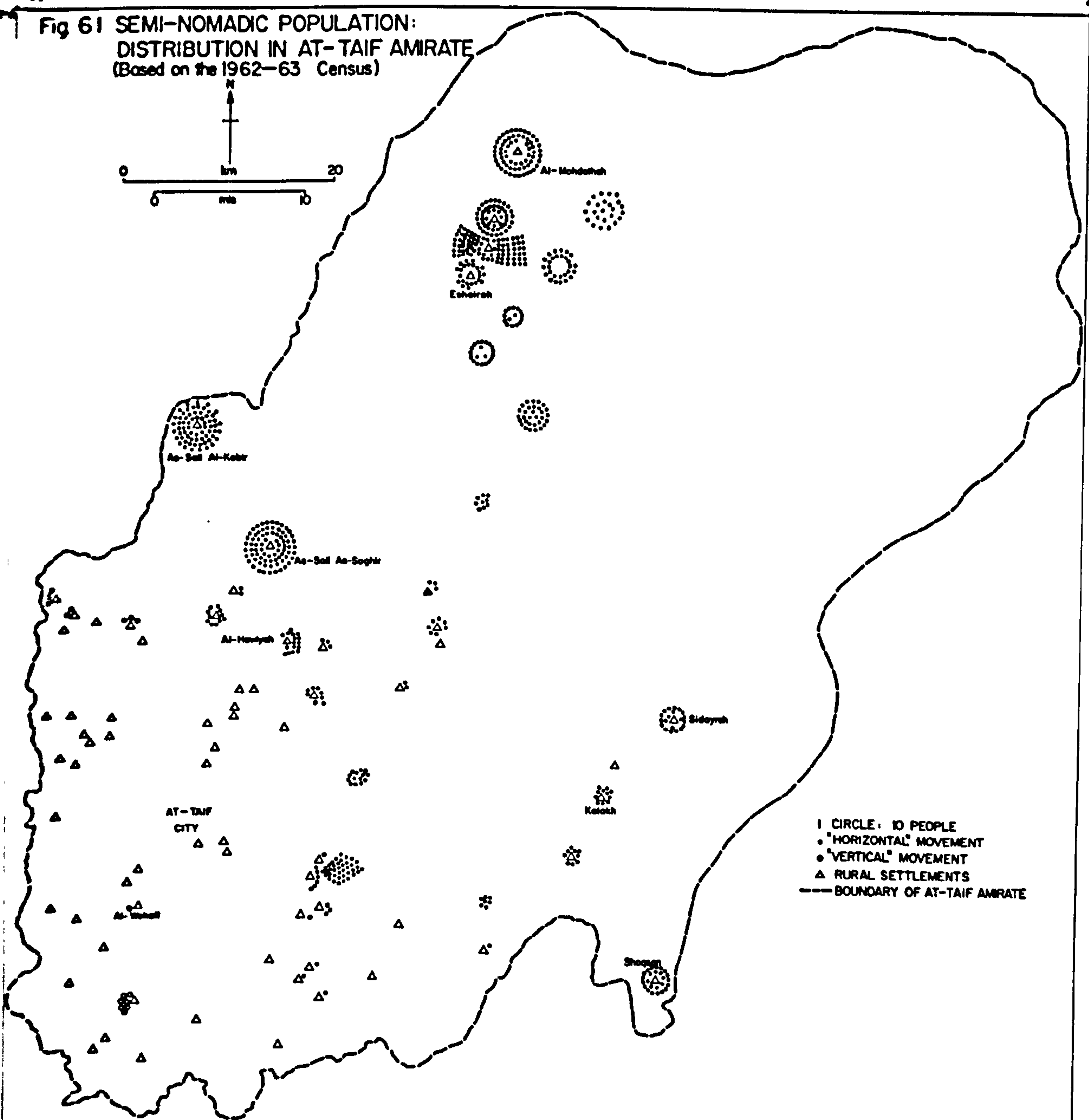
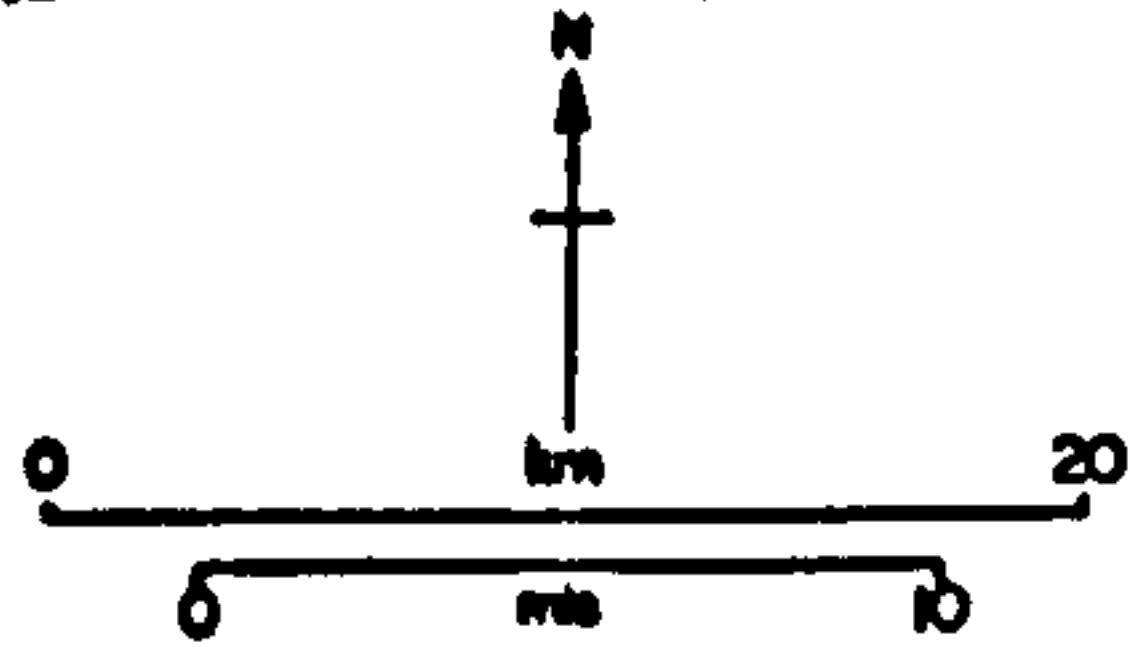
As regards figures, the only available data are those of the 1962-63 census. Their total number, according to the census, was 7,009 persons. Thus, they make up 8.1% of the study area's total population. The total may be divided into three categories. Firstly, there are 4,903 persons attached in the census book to 26 rural settlements, mainly in the eastern and northern parts of the study area. Secondly, there are 1,943 persons attached to nine widely scattered wells, also in the eastern and northern parts; and thirdly, 163 persons (2.3% of the non-sedentary population total) practise transhumance and are attached to six rural settlements in the mountainous west and south-west of the study area. Such a distribution reflects perfectly the adaptation of these people and their economic activities to various local conditions, such as aridity and ecological zonation with altitude. It is illustrated in Figure 6. 1.

Population Composition

A. Age-Structure

The 1962-63 census added most of the non-sedentary population numbers in the study area to its rural population numbers, before any breakdown of age was undertaken. Accordingly, it was impossible to interpret the data because of these complications. The number of non-sedentary people affected by this was 5,066 persons. Thus only 1,943 persons were classified separately according to their age. These 1,943 were separated from rural dwellers because the census made it appear that they were attached to wells and ains - not rural settlements.

Fig 61 SEMI-NOMADIC POPULATION:
DISTRIBUTION IN AT-TAIF AMIRATE
(Based on the 1962-63 Census)



- 1 CIRCLE: 10 PEOPLE
- "HORIZONTAL" MOVEMENT
- "VERTICAL" MOVEMENT
- △ RURAL SETTLEMENTS
- BOUNDARY OF AT-TAIF AMIRATE

Since this was so, the age-group data of these 1,943 people will be taken as if they represented the whole study area.

When we observe the non-sedentary people and their harsh environment, the reason for many common beliefs that the expectation of old age among them is low is easily understood. This is to say that the period of old age, in addition to being short, begins here as early as 50. As a result, the largest proportion of non-sedentary people must be infants, whose numbers are, in turn, affected by a high mortality rate. Migration for the sake of a more affluent life is thus a customary practice. The available data, however, support these beliefs, as will other facts which follow.

1. Out of the 1,943 semi-nomads, there were 807 infants - of ten years old and less. They make up 41.5% of the total number. Such a high number of infants is not surprising. For example, this phenomenon has already been noted in the context of the urban as well as the rural population in the study area. It is related, naturally, to the levels of fertility, and mortality for which we have no data. Relying on observation, it is possible to say that fertility is expected to be high among these people, as the greater the numbers in a community, the better is its overall economic and influential position. Mortality, on the other hand, must be expected to be high also. Though these infants were provided with a permanent supply of milk, the lack of provision of medical services and sanitation must have taken its toll.

2. The second age-group is the 10-30 group. As previously stated, it contains infants (less than 14 years old), adolescents (14-19

years), and young adults - too wide a category for any efficient analysis. However, although it embraces an age-group twice as wide as the previous group, it contains a smaller percentage of the population. There were only 543 persons in this group or 28% of the total population. They are supposed to be the most economically active group in the non-sedentary society, where work demands, above all, sheer physical exertion. It seems as if migration rather than mortality has caused this low percentage.

3. The third group is that of the 30-50 age range - all older adults. They constitute 22.1% of the total, or 429 persons in all. These older adults can be considered too as part of the 'productive' population. Those approaching their late forties, however, would almost be mistaken for people in their late fifties. This is largely a result of the quality of life in such a society as this. Unfortunately, no data are available to show how this influences each sex separately.

4. The fourth age-group is that of 50 years old and over - older adults and aged people. In spite of the fact that the term 'aged', as far as population geography is concerned, applies to people of 60 or even 65 years old and over, the case in underdeveloped countries such as Saudi Arabia is quite different. Here, old age starts much earlier and expectation of longevity is uncommon. This can be illustrated by the low numbers of people aged 50 and over, a phenomenon which was witnessed earlier as regards the age-structure of urban and rural populations. However, as far as the non-sedentary population is concerned, this age group constitutes a low percentage of only 8.4% (164 persons).

B. Sex-Ratios

As was the case with rural population, there is an acute shortage of data relating to the sex-ratios of the non-sedentary population in the Amirate of At-Taif. The only available data, however, are those offered by the 1962-63 census. Unfortunately, they provide only the number of males and females, regardless of their age. Yet, even this is not the overall case because - as in age-structure - the majority of non-sedentary people, or 5,066 persons, were added in the census book to the rural population. Accordingly, the sex-ratios of only 1,943 persons (whose numbers were kept separate) could be used to illustrate the case of the non-sedentary population.

However, there were 979 males compared with 964 females. They constitute, respectively, a percentage of 50.4% and 49.6% of the total number of 1,943 persons. Again, a slight majority of males over females emerges. No data are available to show how much the preponderance of male births, the different mortality of the sexes, and migration can be regarded as factors underlying this difference. However, if we assume that the percentage given above is accurate, and represents the actual situation, it is possible to say that the preponderance of male births was matched by a higher mortality rate of females (due, for example, to a harder way of life). Migration, on the other hand, is more common for males, as they leave for the sake of work or education. Yet, they return soon - as was the case of rural dwellers - for the sake of marriage. Incidentally, these people are very conscious of their blood and breeding. As a result, the percentage of males to females is very similar. The overall picture

must be that the total number of non-sedentary people is on the decline.

The Problems Defined, and Possible Remedies

The non-sedentary population of the Amirate of At-Taif can be considered as the group which is the most self-supporting, on comparison with urban and rural population. In other words, they demand very little in the way of Government expenditure. Very few services and amenities have been provided for them, and this has caused, in turn, a certain regional disharmony. However, this imbalance is not only caused by the fact that it is easier to establish services and amenities for sedentary people, as opposed to the non-sedentary, but also by the fact that many officials, as well as urban people, believe that the semi-nomads are a separate class, who will never adapt willingly to a modern way of life - a false assumption. The semi-nomadic people of the study area (even the true nomads of Saudi Arabia) have shown their readiness to adapt to any modernisation schemes postulated. It is rather fruitless to believe that the way of life of any people, particularly those with deep-rooted customs and traditions, could be changed or altered by force or unplanned efforts.

However small the provided care and attention, the economic contribution of the non-sedentary people may be considered as equally important as that of urban and rural people. For example, through their activities, vast non-agricultural lands have been utilised. Sedentary people are supplied by them with live animals and milk products. Their needs have doubled in importance because of the increasing size in urban population in the Amirate of At-Taif, and the neigh-

bouring cities of Makkah and Jeddah, and because of the rise in standard of living experienced here. As a result, the high demand for the produce of the semi-nomads has:-

1. certainly prevented mass migration;
2. somewhat reduced the attraction of the urban area;
3. enabled them to supplement the small quantity of pasture caused by lack of rain, or over-grazing, by carrying sacks of barley and maize;
4. introduced motor transport for their movement with their herds in search of more pasture. Thus, distance is no longer a difficulty, and the former fear of being far from sources of water has been overcome by the availability of water-trucks. Furthermore, new means of transport can easily carry them to the urban area, according to their need, and even for the pilgrimage to Makkah. A related point is that the introduction of motor vehicles to their society has led to an effective method of social cohesion, because vehicles must be shared.
5. made them concentrate more on sheep herding, though goats and camels are still kept (Plate 6.2). This is influenced by the high demand for sheep. Even if we assume that they are not sold for reasonable prices at the city livestock auction, then the pilgrimage season can guarantee all that. As a matter of fact, the bulk of the population of the city of At-Taif, along with the surrounding cities of Makkah and Jeddah, are great mutton eaters. This pattern of meat consumption can

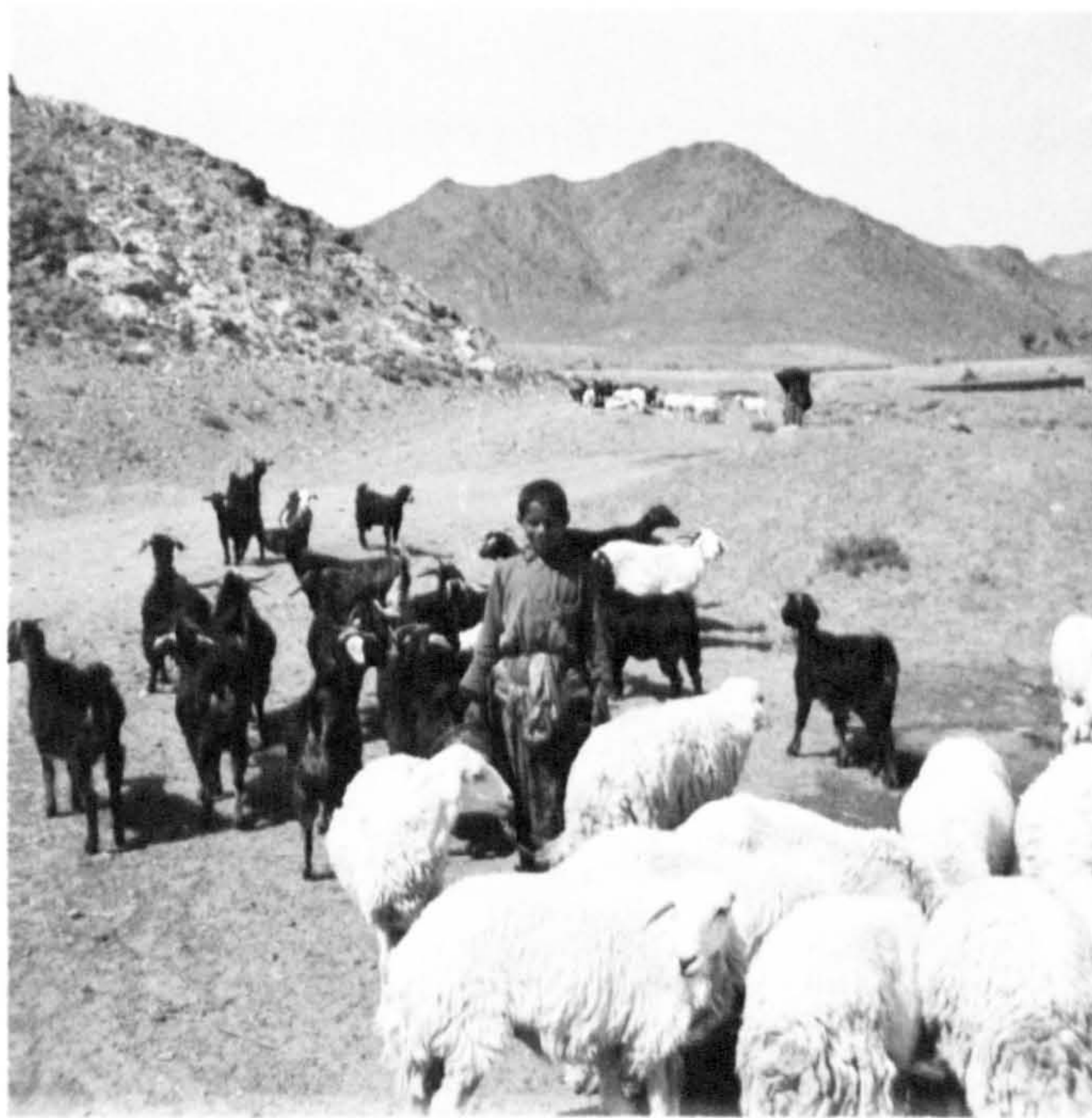


Plate 6.2

"As a result, the high demand for the produce of the semi-nomads has made them concentrate more on sheep herding, though goats and camels are still kept." Page 198

(a) Near the settlement of Al-Wahat, south-west of At-Taif city

(b) Near the ain of Akrab, north-east of At-Taif city

be illustrated by the percentage of slaughtered animals by kind in six selected cities and towns in Saudi Arabia (Table 6.1). It shows, among other things, the complete effect of environment upon the inhabitants' tastes.

TABLE 6.1

Percentage of Slaughtered Animals by Kind in Six Selected Cities and Towns between 11th April 1967 and 21st March 1971

	At-Taif	Makkah	Jeddah	Buraydah	Unaizah	Al-Bekairiyah*
Goats	22.4	22.5	34.6	20.4	6.5	14.7
Sheep	72.4	71.8	59.2	21.4	38.1	15.9
Beef	3.5	3.1	5.8	5.5	4.3	13.0
Camel	1.7	2.5	0.4	52.6	51.1	56.4

* Data begin on 30th March 1968

Source : Bi-annual Municipality Statistics, Undersecretary for Municipal Affairs, vols 1-5, nos 1-9, April 1967 to August 1971 (Arabic)

Though the livelihood of the semi-nomads depends entirely on their business transactions with urban dwellers, they believe that there is still a wide social gulf between them. The picture of the urban dweller in their minds is that he is a fool, a cheater and, to summarise, not manly. To be fair, the urban dweller's opinion of the semi-nomad is the same, if not worse. However, in spite of the fact that the gap is narrowing, there is still noticeable friction between the two. This can be understood, for example, by listening to both sides in conversation.

At any rate, the present difficulties caused by the semi-nomads of the Amirate of At-Taif can be illustrated in the following points.

1. They are, generally speaking, bothersome and truculent. To be wild and hard is to them a sign of manliness. This is undoubtedly a result of the harsh environment in which these people live. It has even affected their way of speaking quite noticeably. When a stranger sees them discussing a simple matter - for instance, buying something - he will certainly have the impression that a ferocious fight will soon break out.

2. Invading agricultural holdings and their surroundings for the sake of obtaining easy pasture is a frequent difficulty encountered between the semi-nomads and the rural dwellers. Once (1954), for instance, it reached the stage when the principal judge in the city of At-Taif, at that time M Al-Baiz, had declared the places called Sallamah and Az-Zihimiyah in the extreme south-east corner of the Amirate prohibited as far as the semi-nomads were concerned. He gave this declaration in order to protect the agricultural holdings of the Ath-Thibatah sub-tribe from the semi-nomads. The declaration, however, was cancelled by the Prime Minister at the request of the prince of At-Taif) in 1958 because of the jealousy and further disturbances it caused between the rural and semi-nomadic populations¹. The phenomenon of invading agricultural holdings and their surroundings, however, has increased, because the hospitable parts of the study area are, as stated previously, finely distributed among the rural population. According to the semi-nomad extremists, it has been increased also by the Government's decision to settle members of the Ash-Shararat

tribe of north-western Saudi Arabia on selected public land north-east of At-Taif city. These people are the victims of the drought which hit north-west Saudi Arabia in 1958 and the following five years. They were brought here for safety, but since the land is hospitable and there is more Governmental help, such as free delivered water (Plate 6.3), they have remained here.

3. Introducing motor vehicles to the semi-nomadic life has created a modern problem. These vehicles, however, are trucks and water-trucks. They are, generally speaking, old, and absence of maintenance (through lack of technical know-how) has worsened the situation. For example, having no rear light or a single headlight is a common phenomenon. Handling these vehicles is another matter of great difficulty. It is rare to find a semi-nomadic driver with a driving licence. Hence, these people are often a danger on the Trans-Arabia Highway (Fig 6.2). For instance, as they travel in groups of ten or more vehicles, the semi-nomads prefer nose-to-tail driving. They will never let any other vehicle interrupt their 'chain', even when they intend to overtake. As a driver in the office of the Amirate of At-Taif put it to me, "the best thing to do is to get out of the road".

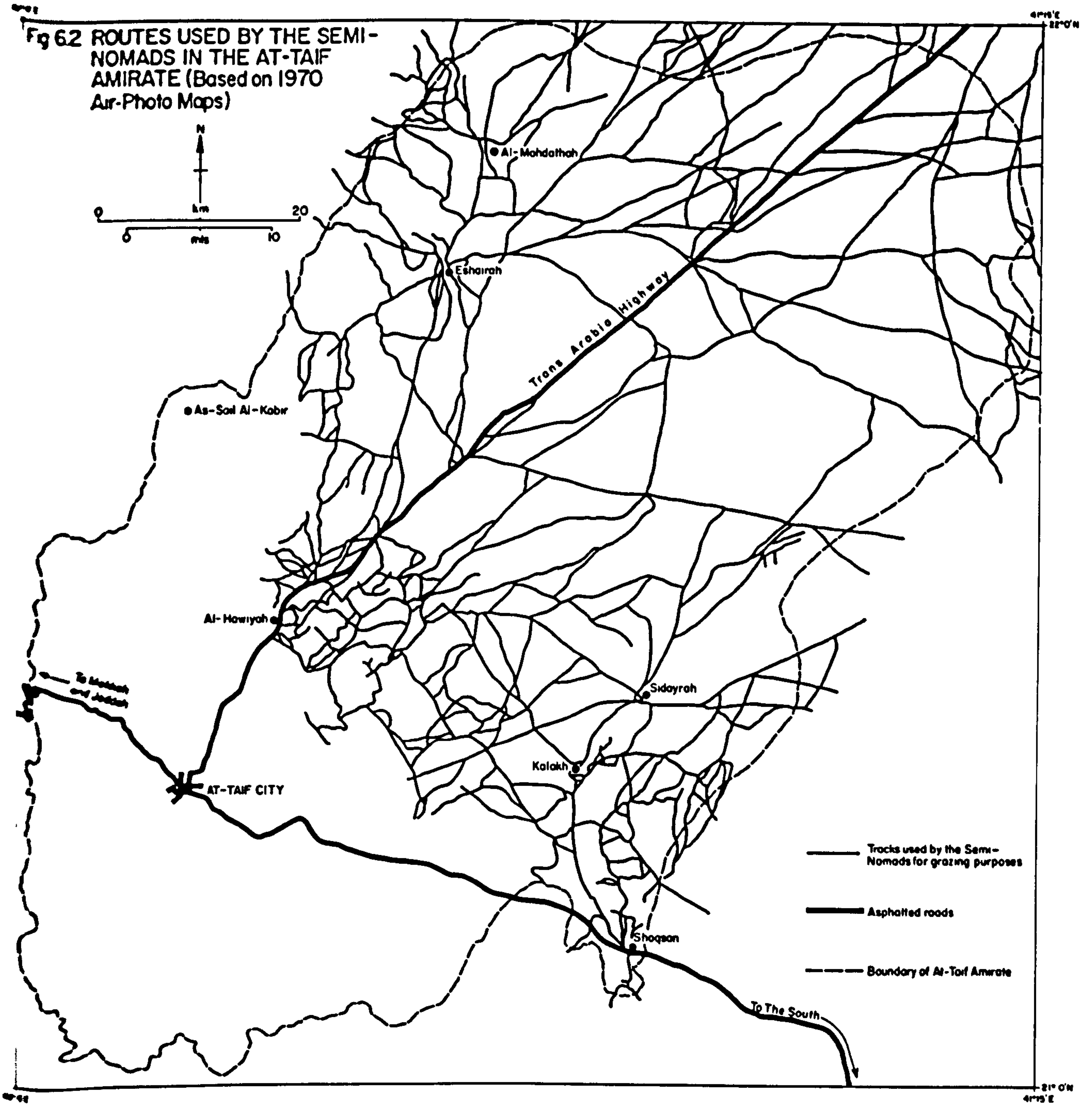
4. Finally, it is possible to say that some of the development schemes have worsened the overall situation of the semi-nomads. It is true that any development scheme will not be successful unless it is well planned in advance. The entire environment - physical, economic and social - must be carefully considered. For example, is it essential to change the traditional construction materials in any place, especially if they have no disadvantages? This has been the case, however, in



Plate 6.3

"The Ash-Shararat tribe of north-western Saudi Arabia was brought here for safety, but since the land is hospitable and there is more Government help, such as free delivered water, they have remained here." Page 201

Fig 62 ROUTES USED BY THE SEMI-NOMADS IN THE AT-TAIF AMIRATE (Based on 1970 Air-Photo Maps)



the new settlement of Eshairah Al-Jadidah, which was built in late 1967 for the purpose of settling the semi-nomads of Wadi Al-Aqiq and to replace in part the traditional Eshairah - both located in the extreme north of the Amirate of At-Taif. Orders were given that mud should not be used as a construction material and, thus, had to be replaced by modern materials - block and cement. Such orders are based on the belief that mud dwellings are a sign of bedouin life, which is a sign of backwardness. "Can't you see," said those 'brainwashed' semi-nomads, "that mud dwellings are concentrated in bedouin areas?" Such a claim is correct if we rely on figures alone. It is true that mud as a construction material is not used, yet it is available throughout Saudi Arabia (Table 6.2). Building materials should be based on the degree of availability, low cost and mode of adaptation to the local climate - not on what is believed to be a sign of economic advance.

As this is the case in general, how can the situation be altered? Which approach should be taken if we intend to provide their society with prosperity and welfare? How can we make these people healthy and wealthy? I believe that all this could be achieved or at least approached, by taking the following steps. Naturally, the country's wealth will finance the development projects.

1. There should be a thorough study of the semi-nomads' way of life, their social and economic conditions. Such a task should be given to experts who know the area well. The resultant study will obviously provide a strong foundation for any development schemes. On the other hand, it would prevent any superficial and poorly implemented projects.

TABLE 6.2

Percentage of Building Permits issued by Five Selected Municipalities

According to Kind of Construction Material between 9th March 1970 and 3rd February 1973

Municipality	Cement	Stone	Mud	Block and Brick	Others
At-Taif	59.7	0.0	0.0	39.8	0.5
Jeddah	64.7	2.0	0.0	24.6	8.7
Buraydah	12.6	1.6	38.4	47.4	0.0
Unaizah	6.7	0.3	65.9	21.2	5.9
Al-Bekairiyah	4.6	0.0	69.7	22.7	3.0

Source : Statistical Yearbook, Central Department of Statistics, Ministry of Finance and National Economy, vols 7-9, 1971-1973

2. The official, as well as the public view of these people should be improved. The semi-nomads are not backward, primitive people. Their existence is essential to the national economy. If, then, we decided to settle them, are we going to turn them into cultivators? Is there any unutilised agricultural land with a plentiful water supply for such a project? If there is, then why do we not utilise it through the permanent cultivators themselves, who are declining in numbers? Do our urban areas need more migrants? The most suitable place for these people is certainly their own pasture land. The tradition man-land relationship of these people (pastoral activities) is surely the best way to utilise this type of land with limited agricultural potential.

3. Thus, in order to keep these people tied to the land, and to prevent them from migrating to the urban area, they should be provided at least with some of the services and amenities of urban dwellers. It is not fair that they should have to visit the urban area whenever they require, for instance, medical services. Such services should be provided for them. Hence, suitable, well-sited points should be selected as central places for establishing essential services and amenities. The semi-nomads require many things - for example, health facilities, veterinary services, range-management advice, supplemented feed storage, and improved communications. Furthermore, establishing television stations with well-planned and particularly educational programmes will certainly effect rapid changes.

REFERENCES

1. Letter No 3978, dated 29th September 1958, issued by the Council of Ministers Presidency

PART THREE

THE ECONOMIC LIFE

CHAPTER 7

AGRICULTURE

The Importance of Agriculture in Saudi Arabia

Although Saudi Arabia is considered, generally speaking, a barren land, agriculture is, in fact, the most important sector in terms of the number of people involved. According to the Central Department of Statistics official sample survey of 1966, 46% of the Saudi Arabian labour force was employed in the agricultural sector. This sector includes forestry and livestock production. Furthermore, agriculture formed the base of the national economy till it was overshadowed by oil. This was completed towards the end of the Second World War. Since then, oil and its revenue provides the major part of budget revenues, and this is constantly increasing because of the absence of any competitors of income source. For example, 83.1% of Saudi Arabia's budget revenues in 1964-65 came from oil and oil revenues, while the percentage increased to reach 96.2% in 1974-75. The vulnerability of depending on one sector as a source of income (particularly when it is not limitless) has prompted the Government to consider the situation carefully. One outcome has been to devote considerable efforts and financial resources to the development of agriculture. The degree of attention can be measured from the fact that (a) "the Saudi Government gives special priority to the development of the agricultural sector on account of its importance for the realisation of the general objectives intended to diversify the economy," * (b) and

* Central Planning Organisation, Achievements of the first five-year plan : 1970-71 to 1974-75, in News from Saudi Arabia of Jeddah, vol x, No 500, p5, dated 12th March 1974

consequently from the growth of the Ministry of Agriculture and Water Budget. It was £6,741,000 in 1964-65 and became £130,318,271 in 1974-75 - an increase of 1,833.2% in ten years.

The Importance of Agriculture in At- Taif Amirate

The Amirate of At-Taif is known to the public, as well as to the Ministry of Agriculture and Water, as a fertile agricultural area. This is based on the following three factors:-

1. The number of agricultural holdings, particularly in the western and south-western parts of the Amirate. Altogether, there are 2,628 agricultural holdings in the Amirate of At-Taif as compared with 145 in Jeddah agricultural area and 1,356 in Makkah agricultural area.¹

2. The quantity of its high-quality fruits, vegetables and roses, which are sought after particularly in the neighbouring cities of Makkah and Jeddah. The same is also true for other produce, such as honey and fresh animal produce.

3. The well-established and renowned high quality of its land and produce. As a matter of fact, such a reputation reaches far back into pre-Islamic days, when it was either based on the writings of historians and travellers or on the existence of remarkable irrigation works such as ancient dams and ains.*

But, unfortunately, there are no figures of the number of people in the study area who depend on agriculture and related branches for

* The ains in the study area are similar to qanats (Iran), karez (Afghanistan) and foggaras (Levant)

their livelihood. However, it is noticeable that agriculture and its associated branches are by far the most important occupations in the rural area of the Amirate of At-Taif. Hence, it could be suggested that they constitute a dominant percentage, perhaps as high as 70% of the study area rural population (25,244 in 1962-63) in addition to its 7,009 semi-nomads, are fully or partly engaged in farming, animal rearing and associated fields of earning. Such numbers have even affected the employment structure in the city of At-Taif. For example, 2.2% of its employed population (15 years and over) were engaged (according to the 1966 official sample survey) in agriculture and animal husbandry. This percentage, however, is lower at the cities of Makkah and Jeddah, respectively 0.6% and 1.3%.

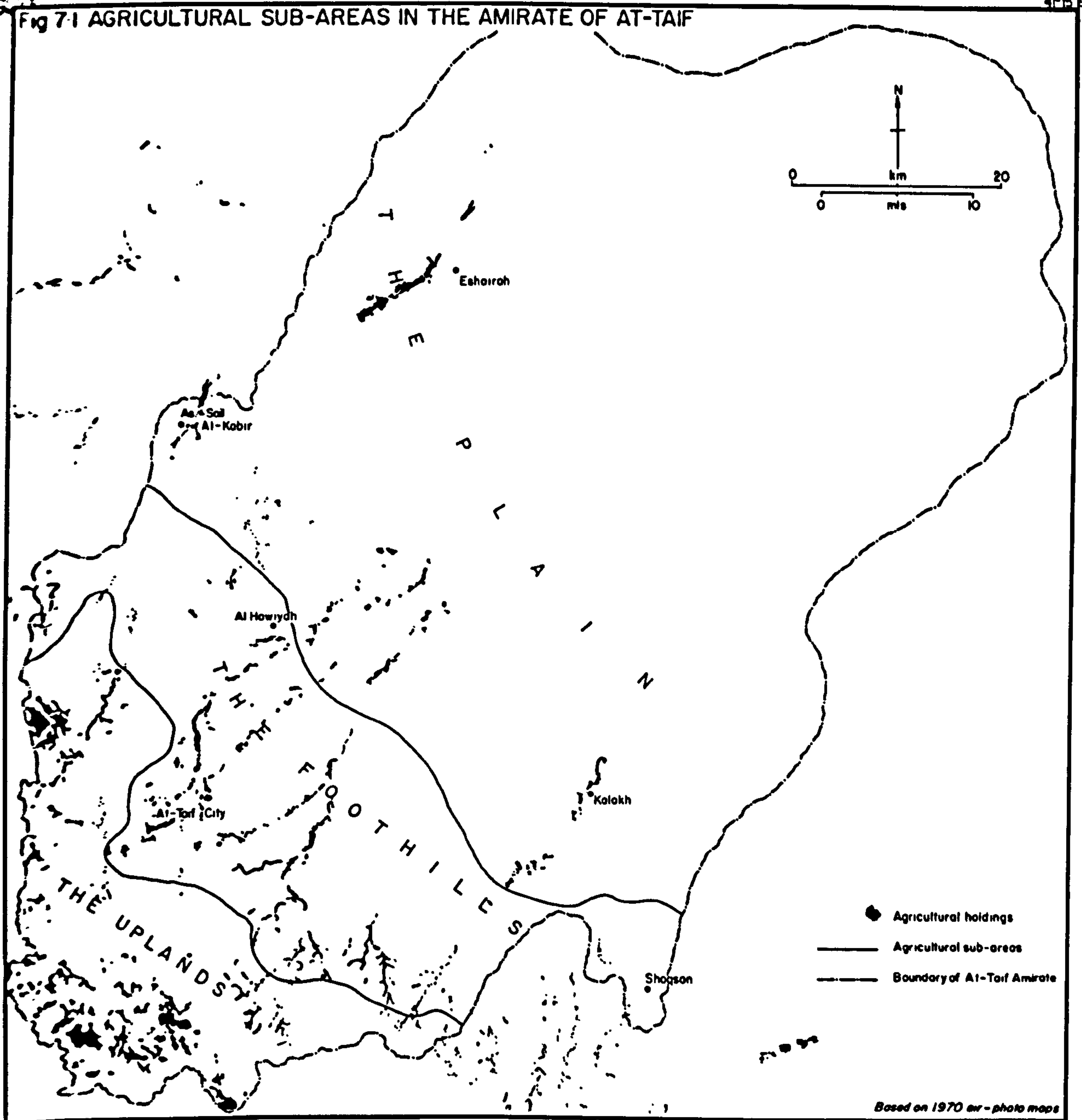
Agricultural Area in the Amirate of At-Taif

It is possible to distinguish three different agricultural sub-areas in the Amirate of At-Taif : the uplands, the foothills and the plain (Fig 7.1). Each actually has its own specific agricultural characteristics. For example, each differs with respect to proportions of cereals, fruits, vegetables and sources of irrigation. However, some differentiation is possible based on the following factors.

1. Topography is the first factor. As shown previously,* differences in relief are characteristic of the Amirate of At-Taif. While the west, south-west and south is rugged with an elevation, generally speaking, of above 2,000m, the agricultural area of Eshairah at the

* See Fig1.3 Chapter 1

Fig 7-1 AGRICULTURAL SUB-AREAS IN THE AMIRATE OF AT-TAIF



Based on 1970 air-photo maps

western fringe of the plain of Rokbah is not more than 1,300 m above sea level. Such differences in altitude have noticeably influenced temperature, amount of rain and cloud cover in the Amirate of At-Taif. * In other words, temperatures tend to increase as one moves from the west and south-west of the Amirate, towards the east and north. Rain becomes more scanty and the sky becomes noticeably clearer.

2. The geological structure of the Amirate plays a significant role too, for it has influenced soil structure, and the amount of underground water. For example, although the uplands receive the highest rainfall, because of the hardness and impermeability of the rocks, it has the lowest amount of underground water and the least soil cover. **

Accordingly, the physical environment in the Amirate of At-Taif offers a range of agricultural possibilities. This can be shown in the variety of fruits grown (for example, grapes, apricots, figs, peaches, apples, prickly pears, mulberries, guavas, oranges and tangerines) caused by different favourable climatic conditions. Also, both winter and summer vegetables are produced in the Amirate at the same time. Naturally, such a wide range of choice provides opportunities to improve diet and increase the income of the cultivators. But, as will appear later, shortage of water among many other things tends to limit the potential of the agricultural area. However, the agricultural characteristics of the aforementioned three sub-areas will be dealt with in the following discussion as fully as possible, in order to illustrate their heterogeneous characteristics.

* See Figs 1.4, 1.6 and Table 1.3, Chapter 1

** See Fig 1.2 and Plate 1.9, Chapter 1

Changes in the Agricultural Area

Although agriculture holds this position in the Amirate of At-Taif, the size of the agricultural area is, surprisingly, unknown. For instance, it constitutes 3,503.9 hectares according to the Ministry of Agriculture and Water census held during the period 29th October 1962 to 25th January 1963 (Table 7.1). This is based on the first and only census to be held there. A few years later (1967), the consultant firm Italconsult carried out its second cycle of studies of "water supply surveys for Jeddah-Mecca-Taif area". According to this study, the agricultural area is 5,732.8 hectares. Clearly, this figure is much higher than that in 1962-63. It is impossible, however, that such an expansion in the agricultural area could have occurred, especially within the short period of 60 months, and where no expansion schemes were carried out. However, the difference between these two official and semi-official sources is even greater with respect to the size of the uncultivated area. As shown in Table 7.1, the uncultivated area (i.e., that which was not actually under cultivation during the period of data collections) was only 597.2 hectares in 1962-63, and 2,809.0 hectares in 1967. Hence, the latter figure is almost five times larger than the previous one.

In an attempt to interpret the values, then, of these contrasting figures mentioned in Table 7.1, it is possible to state that:-

1. The 1962-63 figures which were given by the Ministry of Agriculture and Water were actually a result of a random survey of holding size extrapolation. The enumerators have measured only 0.8% of the total number of holdings in the Amirate of At-Taif. It is likely,

TABLE 7.1
Size (ha) and Percentage of Cultivated and Uncultivated Area in the Amirate of At-Taif
in 1962-63 and 1967

Year	Agricultural Area	Cultivated	Percentage	Uncultivated	Percentage
1962-63	3,503.9	2,906.7	82.9	597.2	17.1
1967	5,732.8	2,923.3	51.0	2,809.5	49.0

Source : 1962-63, Ministry of Agriculture and Water, Agricultural Census of Western Province and Al-Madinah
1967, Italconsult, water supply surveys for Jeddah-Mecca-Taif area, second scale of studies

however, that figures based on such a low sample are much removed from the actual situation. This adds up to a low proportion. In addition, the low degree of technical abilities and quality of personnel involved in actual data collection must have had an effect consequently on quality and quantity of data. It is the writer's view based on field observation that the uncultivated area is actually greater than the low figure would suggest.

2. The case as regards the 1967 figures is quite different. These data have been collected by the consultant firm, Italconsult, which could be regarded as being well equipped for such work. Its measurement of holdings was carried out by a detailed study in the field, with the help of air-photo interpretation.

3. Figures given for the uncultivated area by Italconsult (2,809.5 ha) appear much more reliable than those given by the agricultural census (597.2 ha). The wide range of agricultural holdings left uncultivated is observable everywhere in the Amirate of At-Taif (see Plates 5.4 and 5.5). The existence of this phenomenon is related to many factors such as scarcity and irregularity of water, and migration of cultivators. Also, it is related to the fact that cultivators intend to keep as much space ready for cultivation as possible. However, when rain and/or floods increase and, as a result, the output of wells rises, these reserved spaces become directly under cultivation. Cultivators are, naturally, forced to do so because rain - as shown previously - is unreliable. Hence, unwise expansion of the cultivated area is always risky.

4. Accordingly, it appears that figures offered by Italconsult

represent the real situation more accurately in the Amirate of At-Taif. However, since 1967, the year when this survey was carried out, a considerable change in the location and size of the cropped area must have occurred. In the absence of more recent data, there is no alternative but to use those figures of 1967.

But, in the absence of other reliable figures to compare, it becomes impossible to find out what change in agricultural area has occurred : unavailability of official data has made it impossible to be positive whether or not there has been an expansion or shrinkage in the agricultural area. Accordingly, the following interpretation is based on personal observation and investigation carried out by the author in the field. It showed, sadly, that the cultivated area in the Amirate of At-Taif is not expanding in size but rather shrinking - a hypothesis based on the following points:-

1. There has been no distribution of arable lands on any large scale to cultivators by the Government. This is related largely to the fact that arable land in the Amirate either belongs to individuals or a clan or tribe with general ownership. This differs from the case in most of the rest of Saudi Arabia where, for example, the Government has distributed between 1970-71 and 1972-73 31,625 hectares to 5,221 beneficiaries.

2. There have been no projects to expand the cultivated area in the Amirate of At-Taif. If there is any expansion, then it is no more than individual cultivator's efforts to add a few extra plots to his holding. In addition, it is rare to see any virgin lands ploughed up. There was, however, one exceptional case. This took place in As-Sail Al-Kabir

to the north of the city of At-Taif. When the Government rerouted the traffic to the new road which crosses the uplands (1965), those who did not leave As-Sail Al-Kabir looked to the land. About 20 hectares of virgin and fallow lands were subsequently ploughed up.

3. The purchase of agricultural lands of Al-Mathnah, Al-Wahat and Al-Wohait (to the south-west of the city of At-Taif) from its owners by the Government in 1972, has put an end to the pre-Islamic orchards and vineyards here (67 hectares in area). The reason for this purchase was to divert its water for city use. As a result, At-Taif city has lost, perhaps for ever, its nearest and most suitable 'green' area, which has been used through the ages by both its permanent and 'floating' population, for pleasure and recreational purposes. Also, this area used to provide the local market with vegetables, fruits and alfalfa.

4. The agricultural area which surrounds the city of At-Taif has been hit severely by its owners' decision to sell soil. They sell it to tipper-truck drivers, who in turn carry it to the city for the use as a construction material. The high rate of building permits issued by the municipality of At-Taif (2,265 during the period 9th March 1970 to 3rd February 1973, or an average of 755 permits per year) has provided a growing market for this commodity. This strange trade takes place in the following forms:-

- (a) When the agricultural holding is left unused, its owner finds it profitable and reasonable to let people carry soil from it. He will do no work himself except to supervise the removal. In addition he charges about £0.50 for each cubic metre of

soil.

- (b) Those who keep their holding under cultivation are also involved. They let tipper-truck drivers carry soil (for money) from adjacent places or even from wadi beds. Removal of soil, according to them, involves no danger whatsoever for them or for their land. In fact, this action means simply that soil cover in wadi beds is getting thinner and, accordingly, its capacity for bearing water will be considerably reduced. In due course, the amount of underground water and the absorption of flood waters will be much less than it used to be.
- (c) Some tipper-truck drivers avoid restrictions by acting at night in any suitable area near to the city. Their earnings naturally rise by doing so. However, this phenomenon is so common that the frequency of these trucks driving around the urban area in search for a 'safe reservoir' cannot pass unnoticed. What has increased it even more is the absence of a common penalty for such activities.
- (d) The municipality of At-Taif has its role in this 'tragedy' too. Places are made available where people can obtain soil. But, these are noticeably near to the city of At-Taif, and they are likely to be developed later on. Others are near to an agricultural area or where the land possesses natural beauty or a 'green' cover. All these facts have been verified by personal observation.

By 1965, the municipality of At-Taif made the area north-east of At-Taif city (known as Al-Jal and Kamlah) available as a soil source area. Two years later (1967) this area had been restricted because of (a) complaints of owners, and (b) the expanding urban area. The landscape of Al-Jal, however, is still disturbed (late 1973) by huge open pits (Plate 7.1). The newly chosen area was Ar-Rabwah (on the city's north-western fringe). By 1969, it had been restricted, again, for the same two reasons mentioned above.

So, attention has been concentrated on the south-western fringe known as Al-Wahat and Al-Wohait - both agricultural villages. Tipper-truck drivers have been ordered by the municipality to pay a sum of £0.10 for each cubic metre of soil they remove. This money is to be paid to land owners. However, only one year later (1970) disagreement between the two parties necessitated the intervention of the local authority. Thus (1971), fleets of tipper-trucks have been directed to the fertile Wadi Liyyah to the east of At-Taif city. This wadi, however, is supposed to serve, according to consultant reports, some of the water needs of the expanding city. Carrying soil from Wadi Liyyah has been offered free of charge on a condition that agricultural holdings are not affected. Again, the danger lies in removing soil from the wadi bed, which functions as an aquifer and supplies the many scattered wells on both banks.

Choosing a pit site is a very important matter, needing full and detailed study. For instance, it should not be near the urban area or any agricultural area. Landscape beauty, grazing possibilities and the existing aquifers should always be retained. Furthermore, full attention



Plate 7.1

"The landscape of Al-Jal, however, is still disturbed by huge open pits."

should be paid to future possibilities and requirements.

5. Another reason behind the decline of the agricultural area that surrounds the city of At-Taif is the outcome of the action of the owners/cultivators of agricultural holdings. This time, it is by selling water that is supposed to irrigate their crops. These people have found it more profitable to sell their water to water-truck drivers and accordingly to citizens than to crop their holdings. After all, it will cost them nothing but operating a pump to fill waiting water-trucks (Plate 7.2); they receive up to £0.30 for each cubic metre of water. It is the scarcity of water supply in the city of At-Taif that made such business profitable.

6. It should be stated that migration of cultivators to urban areas is a very important reason for this decline. These people leave their lands, and thus farming, for the city life of At-Taif, or other attractive urban areas such as Ar-Riyadh and nearby Jeddah. This movement of people off the land is based on the existence of 'push' factors in their rural area, and of 'pull' factors in the urban area. The poverty of cultivators, and their subsequent low incomes, which are also highly irregular, all contribute to this rural-urban movement. Also, the low provision, for instance, of education and medical facilities in the rural areas, in comparison with the urban area, obviously plays an important part. The overall case can be understood in terms of the frugal income which agriculture provides. For example, the socio-economic survey of Western Province (which includes the Amirate of At-Taif) conducted by Robert Matthew, Johnson-Marshall and Partners in 1971 showed that agriculture provided no more than 40% of each family's needs.



Plate 7.2

"After all, it will cost them nothing but operating a pump to fill waiting water-trucks." Page 217

Wadi Wijj, upstream of At-Taif city

The rest (60%), accordingly, must come from either these relatives who have already migrated and who send money to those left behind, or from Government aid.

7. Finally, if we rely on historians and travellers, it appears also that the cultivated area is declining. In the past, greater care was directed to cultivated land. Originally, there were no serious competitors for income and earning, than that offered by agriculture. However, the most interesting example with regard to this point is that of the agricultural lands of Al-Wahat to the south-west of the city of At-Taif. Here Amr Ibn Al-Aas (conqueror of Egypt in 639 AD) had, according to Yakut, 1,000,000 vines. When the Umayyad Caliph (715-717 AD) Solaiman Ibn Abdel-Malik, passed Al-Wahat on his way to the city of Makkah, he admired these vines except for what appeared to be a 'lava bed' situated in the middle! The Caliph was told that it was no more than a mound of raisins!² At any rate, Al-Ojaimi (1639-1702) indicated that Al-Wahat in his time was not even one-tenth of that reported during the time of Amr Ibn Al-Aas.³ Nowadays (1974), however, Al-Wahat is no longer a 'green' area. It has reached this final stage of decline after the Government bought the ain used to irrigate it.

Furthermore, it is pertinent to add that the agricultural area in Al-Hijaz, and particularly near its main urban centres (Makkah, Al-Madinah and At-Taif) has fallen behind the stage it reached during the era prior to the rise of Islam (622 AD), and during the beginning of its expansion (634 AD). Al-Hijaz has pushed out its men to various places such as Syria, Egypt, Iran and Iraq in order to propagate the faith. As such movement shifted the seat of power and importance from Al-

Hijaz, other results also followed. One of them was the decline of agriculture. Numerous irrigation works made formerly have always been a matter of mystery to following generations. Also, another feature behind the expansion or otherwise, of vineyards in particular, is the prohibition of alcohol by religion - Islam.

Holding Characteristics

1. Size and Form

As shown in Table 7.2, holdings of less than one hectare constitute the majority of holdings in the area of influence of the Ministry of Agriculture and Water office in At-Taif city. Numerically, out of the total number of holdings (9,076), 6,510 holdings, or 71.7%, are each less than a single hectare in area. This phenomenon is also seen in the neighbouring Makkah-Jeddah and in the Al-Madinah agricultural areas - where they constitute 75.7% and 89.6% respectively. On the national scale, the situation is somewhat similar, with 55.6% or 138,667 holdings each having a size of not more than a single hectare.

As the holdings are tiny, those who farm them are the owners - few landlords possess large holdings. For example, in At-Taif agricultural area, only 310 holdings, or 3.4%, of the total are more than ten hectares. The percentage is a little higher (6.9%) in Makkah-Jeddah agricultural area, and slightly lower (0.4%) in Al-Madinah agricultural area. For the whole country (Saudi Arabia), again no remarkable difference can be witnessed, as only 8.1% of the total number of holdings are ten hectares or more.

The phenomenon of tiny holdings shows clearly that (a) the

TABLE 7.2

Distribution of Holdings by Size (ha) in Area of Influence of Agricultural Offices in the Cities of

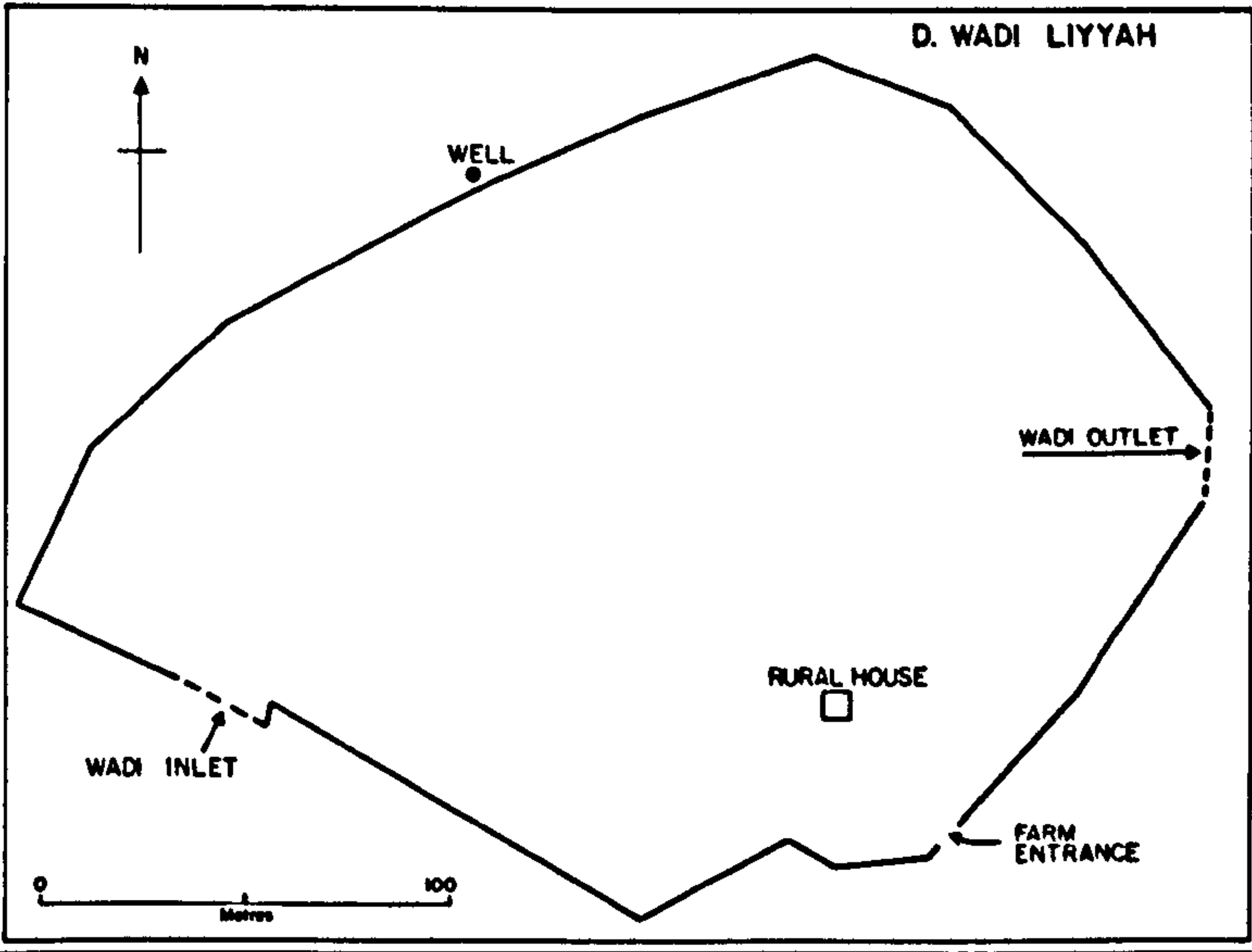
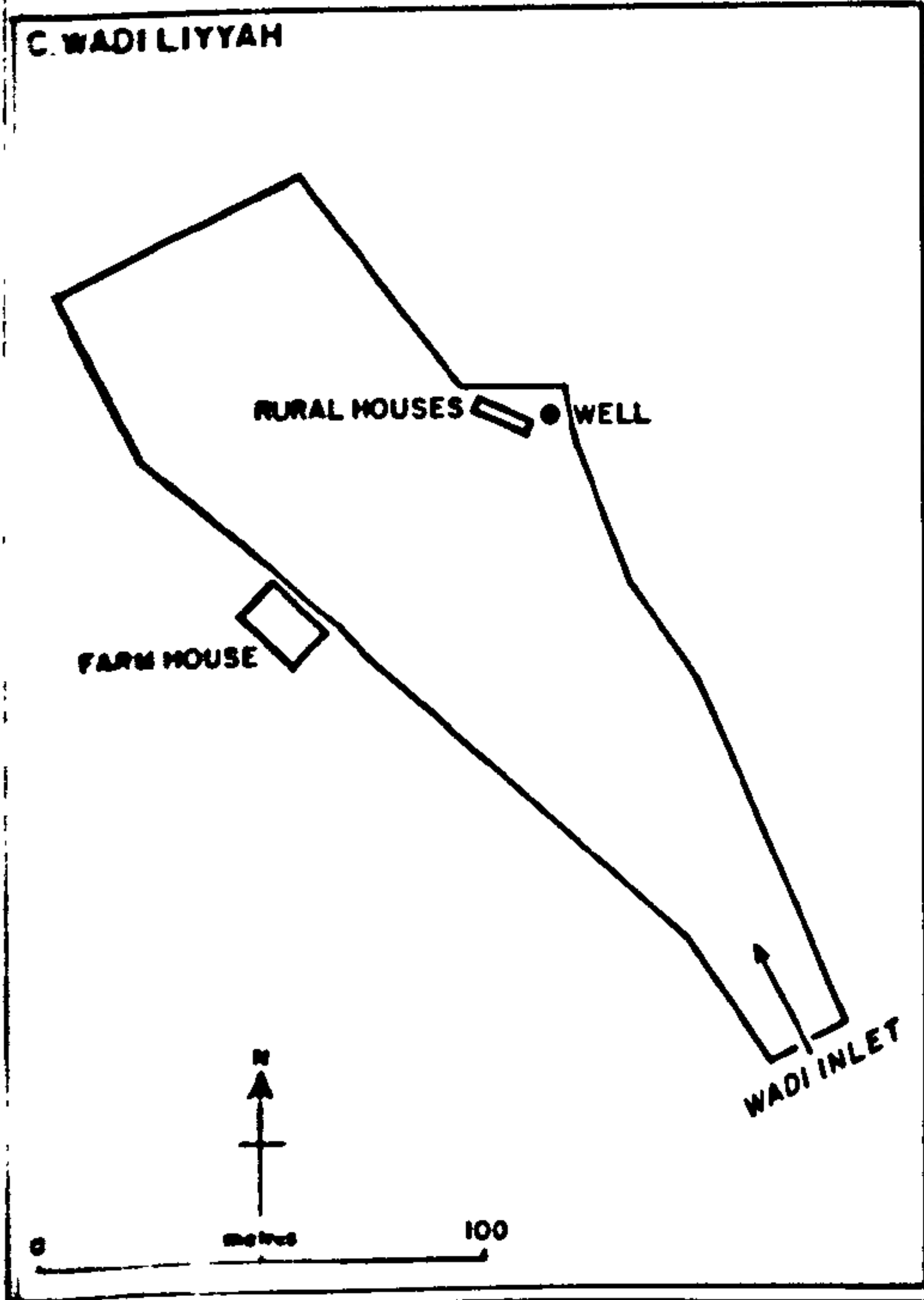
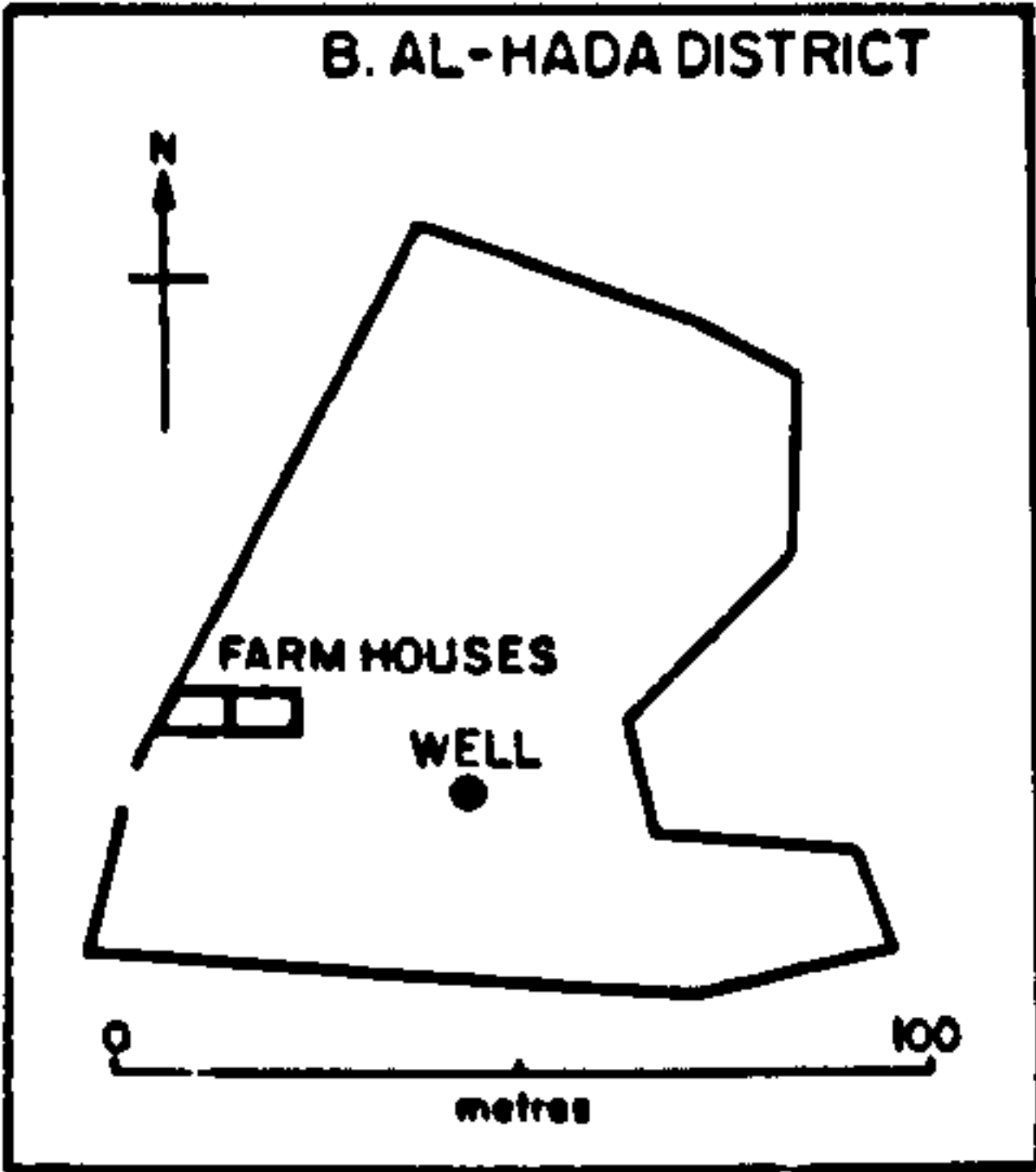
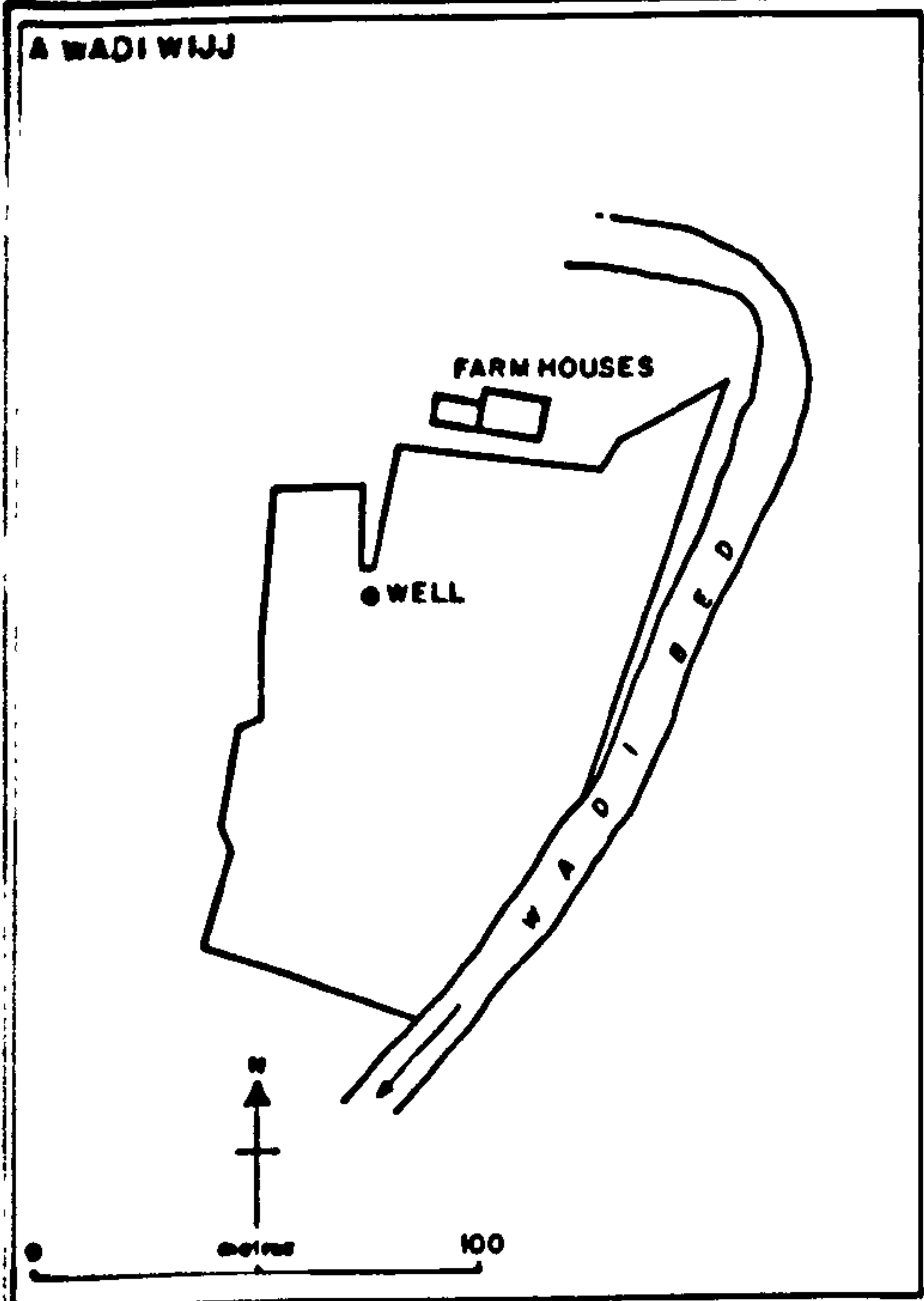
At-Taif, Makkah-Jeddah and Al-Madinah, 29th October 1962 to 25th January 1963

Size of Holding (ha)	At-Taif	%	Makkah-Jeddah	%	Al-Madinah	%
Less than one	6,510	71.7	1,136	75.7	6,301	89.6
From one to less than three	1,623	17.9	177	11.8	538	7.6
From three to less than 10	633	7.0	84	5.6	168	2.4
10 and over	310	3.4	104	6.9	29	0.4
TOTAL	9,076	100.0	1,501	100.0	7,036	100.0

Source : Ministry of Agriculture and Water, Agricultural Census of Western Province and Al-Madinah
of 1962-63

Fig. 7.2 CONTRASTING MORPHOLOGIES IN AGRICULTURAL HOLDINGS IN THE AMIRATE OF AT-TAIF

(After Italconsult, 1968)



This missing uniformity can be attributed to the following factors:-

1. There is no attention whatsoever given to achieving uniformity of holdings, because discussing advantages and disadvantages of appearance and design appears to be of no importance to the community.
2. Absence of uniformity is aggravated by inheritance practices, which tend to deform the already small and shapeless holdings. Such practices have many disadvantages, for they hamper increases in agricultural production. For example, mechanical cultivation is entirely out of the question.
3. It may be added that it is possible to relate the lack of uniformity in shape of holdings located in the mountainous area of the Amirate of At-Taif to terrain. Such rugged terrain has perhaps prevented uniformity. But, no such explanation can support the irregularity in shape of holdings to be found in the plain, but possibly this could be true in the foothills.

2. Holding Ownership and Tenancy

As regards type of tenure, three different types can be distinguished in the Amirate of At-Taif, as well as elsewhere in Saudi Arabia. These are (a) owner-occupied holdings, (b) rented holdings, and (c) mixed holdings. The percentage of owned holdings is really remarkable in comparison with the two other types of tenure. For example, while owned holdings amount to 97.0%, rented and mixed holdings amount to only 1.7% and 1.3% respectively. Such a feature is related to two points:-

- (a) It is not common for the rural population (almost totally

cultivators) to rent or share agricultural holdings. This is based on the fact that the greater majority of them are owners of at least a single holding, regardless of its size or potential.

(b) Accordingly, if rent is taken, it goes then to interested urban dwellers. But, because of the fact that both parties (rural and urban) are wary of each other, the number of rented or mixed (shared) holdings is never large. Thus, if urban dwellers become involved in farming (and this in itself is not common), they prefer to buy holdings rather than to rent or share them.

However, when holdings are distributed according to their type of tenure (Table 7.3), the following points are evident.

(a) When owned holdings were distributed according to size, it appeared that the majority (70.1%) are less than a single hectare in area. This is the case of At-Taif which is, as a matter of fact, similar to that in Makkah-Jeddah (73.6%) and Al-Madinah (68.3%). The percentage declines, however, when size of holdings increases. For example, only 3.9% of owned holdings in At-Taif have a size of ten hectares and over. Again, similar cases are witnessed in Makkah-Jeddah and Al-Madinah.

(b) As far as rented holdings are concerned, it appears (as shown previously) that they do not represent a large number of holdings - only 151 as compared with 8,801 owned holdings. However, 50.3% are below one hectare in size. The percentage is quite different for Makkah-Jeddah (80.6%) and Al-Madinah (44.3%). This indicates, however, the attraction which the agricultural area in Makkah-Jeddah holds, as compared with that in Al-Madinah. The vast markets of Makkah-Jeddah

TABLE 7.3

Distribution of Holdings by Type of Tenure, in the Area belonging to Agricultural Offices in the
Cities of At-Taif, Makkah-Jeddah and Al-Madinah, 29th October 1962 to 25th January 1963

Size of Holding (ha)	Owned Holdings				Rented Holdings				Mixed Holdings			
	At-Taif	%	Makkah- Jeddah	%	Al- Madinah	%	At-Taif	%	Makkah- Jeddah	%	Al- Madinah	%
Less than one	6,167	70.1	936	73.6	4,657	68.3	76	50.3	174	80.6	78	44.3
From one to less than three	1,633	18.5	147	11.6	1,420	20.8	45	29.9	32	14.7	61	34.7
From three to less than ten	653	7.5	85	6.6	604	8.8	24	15.8	6	2.9	32	18.1
Ten and over	348	3.9	105	8.2	143	2.1	6	4.0	4	1.8	5	2.9
TOTAL	8,801	100.0	1,283	100.0	6,824	100.0	151	100.0	216	100.0	176	100.0
							124	100.0	12	100.0	36	100.0

Source : Ministry of Agriculture and Water, Agricultural Census of Western Province and Al-Madinah of 1962-63

with their high urban populations (respectively 301,000 and 381,000, while Al-Madinah city has a total of 137,000 persons)* have certainly assisted this situation. However, it would appear also that rented holdings are not favoured when size of holding increases. For example, while 4.0% of rented holdings in At-Taif have a size of ten hectares and over, a similarly low percentage appears in Makkah-Jeddah (1.8%) and in Al-Madinah (2.9%).

(c) In addition to owned and rented holdings, there is a third type of tenure : mixed holdings. It has, first of all, a low number of only 124 holdings, as compared with 8,801 owned holdings and 151 rented holdings. There are few of these in Makkah-Jeddah (12 holdings) and in Al-Madinah (36 holdings). The main reason for this is related, as mentioned above, to the lack of co-operation between the societies - rural and urban.

(d) Rented and mixed holdings are concentrated in particular on the fringe of the urban area - the city of At-Taif. Here, agricultural holdings are used for growing vegetables (market gardening) which supply rising demand and fetch encouraging prices. Being next to an area of consumption (the city), vegetables can be transported without difficulty or delay. Hence, they are offered fresh at competitive prices, rather than if they were grown on distant holdings.

Labour

It is possible to distinguish four different types of agricultural

* Robert Matthew, Johnson-Marshall and Partners, socio-economic survey of Western Province, 1971

labour in the study area. Each, however, differs from the others as regards the number of persons involved and their importance. Also, they differ in accordance with location and season. However, the most important sort is that offered by members of the cultivators' families themselves, followed by share cropping labour. The third and fourth types are, respectively, permanent and casual hired labour, and have a less important role. In more detail, the overall case reveals that:-

1. Labour supplied by cultivators' families is the most common labour supply in the Amirate of At-Taif. Members of each family, including females and children, without exception, become involved in one way or another in agricultural activities. Their contribution may last from dawn to dusk over a period of any length or just for a few hours. Accordingly, numbers of this type are the highest in comparison with the other three. For example, the agricultural area of the Amirate of At-Taif has a labour force (all supplied by owners of holdings' families) of 5,143 persons, or 89.3%. As a result, the remaining three types number only 619 persons, or 10.7%. This is based, however, on the Ministry of Agriculture and Water census taken in 1962-63.

There were in 1962-63, some 2,667 families that owned holdings in the Amirate of At-Taif. They totalled 19,910 persons. Hence, each family, on average, constitutes 7.5 persons. In detail (Table 7.4), 1,315 families, or 14.1% have each a total of six people. 1,227 families (13.7%) have each a total of five persons. Also, while only 160 families (1.7%) have each a single person, 358 families (3.8%) have each a total of 15 persons or over. These

TABLE 7.4

Distribution of Holding Owners' Families According to Size
in Area of Influence of Ministry of Agriculture and Water Office
in At-Taif City, 29th October 1962 to 25th January 1963

Number of People	Number of Families	%
1	160	1.7
2	604	6.5
3	828	8.9
4	1,188	12.8
5	1,277	13.7
6	1,315	14.1
7	990	10.6
8	883	9.5
9	568	6.1
10	456	4.9
11	241	2.6
12	211	2.3
13	125	1.3
14	107	1.2
15 and over	358	3.8
TOTAL	9,311	100.0

Source : Ministry of Agriculture and Water, Agricultural
Census of Western Province and Al-Madinah of
1962-63

figures, however, are for the area of influence of the Ministry of Agriculture and Water office in At-Taif city. As said earlier, this area is larger than the study area as regards size and population.

The large number of people in each family on the one hand, and the small size of holdings on the other have created one common feature - low incomes. This seems to be a serious problem all too visible to the observer. When one examines the situation closer and talks to the people themselves about their actual incomes, the situation appears even worse. For example, in Adh-Dhahya on Wadi Wijj, upstream of At-Taif city, "eighty persons who are related in varying degrees are involved in farming a gross area of less than one hectare, and who claim to have no other source of income than the farm".⁴ Such claims should always be closely scrutinised. By experience, these claims are expected everywhere in the study area. However, these people's answers have been governed, directed and accordingly exaggerated by the following factors:-

(a) They are used to hiding facts and appear to have a poor standard of living, in order to get Government help, even if they do not exactly deserve it.

(b) The same mode of thought is followed also as fear of the 'evil eye'. This is strong enough to deserve almost the term 'disease' here. It is regarded by most as dangerous to tell others if you possess wealth, however small.

(c) They lack the ability to value questionnaires. After all, why are strangers (enumerators and the like) asking these personal questions? No-one should know the details of their lives. It is the

writer's strong impression that these people have a distinctly lower standard of living than they admit too.

2. The second group of labour supply is that of the sharecroppers. This group is especially concentrated near the urban area (the city of At-Taif) rather than elsewhere in the Amirate of At-Taif. This is because most of the holding owners are connected in some way with the city of At-Taif. Accordingly, having a partner means extra income as well as keeping the holding under the plough. Such a chance, however, has been seized by immigrants from the Yemen. These people have been attracted by this type of work. When asked by the writer about the income they received from such work, "Ch man, God brings all the welfare" was the conclusive answer! At any rate, sharecropping labour takes three forms :

- (a) When the crop is vegetables and owners of holdings participate in all work, two-thirds of the overall income is given to them. Accordingly, the rest (one-third) is given to sharecropping labourers. This is the case, for example, in Al-Jefejef on Wadi Wijj, downstream of At-Taif city (Plate 7.3), where lettuce and spinach are grown in particular.
- (b) When the holding owners do not participate in running the holding ('silent partners'), only one-third of the holding income may be given to them. The rest (two-thirds) will go directly to sharecropping labourers. They actually prepare the soil, lay out the basing and drills, dig the irrigation channels, buy their fertilisers and seeds, sow the crops, tend them and harvest them. Naturally, the holding owner



Plate 7.3
Cultivation of vegetables. (Note sharecropping labourers)
Al-Jefejeef on Wadi Wijj, downstream of At-Taif city
Page 229

provides the water and this comes from his well.

- (c) When the holding consists of fruit trees or vines, the income will be divided equally between the two parties.

3. The third group is that of permanent hired labour. Though it is not common, it is available more near the urban area. This is the case (being uncommon) because of the fact that income derived from running a holding is not enough to cover hired labour. Also, because there is no shortage of labour in the study area. As said earlier, cultivators' families are rather large and always provide a free labour supply. However, it appears that almost all these permanently hired labourers are Yemeni immigrants.

4. The fourth group contains casual hired labour. They are also small in number. They differ, however, from permanent hired labour in so far as they are less skilled. Hence, they are hired for limited work, such as digging a well. Again, they are Yemeni immigrants who have not yet come across permanent work. Accordingly, today they may be labourers in At-Taif city, and tomorrow they may be pedlars in the city of Makkah.

Thus, it is possible to say that the phenomenon of sharecropping and/or hired labour is not common in the agricultural area of the Amirate of At-Taif, although numbers of cultivators are declining through migration, alternative employment and the spread of education. But, amazingly, vacancies for hired labourers have not attracted many. This is related to the fact that agriculture, as a source of income, is no longer attractive and profitable. The overall case, however, is of a slow shrinkage in the agricultural area.

The Role of Farm Machinery

The poverty of farmers has made the role of farm machinery limited and unimportant. How could he buy such equipment with his meagre income? Even if he managed to get it, repairing would always be a heavy burden. But, even if we assume that he could afford such machines, the holding size is a major barrier to economic use.

It could be said that mechanical pumps are the most widespread machinery in use in the agricultural area of the Amirate of At-Taif; these have special attraction for farmers. However, the spread of pumps has not come without incident. For example, an American-made pump is widely used by farmers, and as a result, dealers have put its price up, so that it is now expensive. This in turn prompted others to import another specially made machine from Pakistan which closely resembled the American pump, but was cheaper, though far less efficient. After a few months these often break down, leaving the farmers with a considerable financial loss.

Even powerful machines do not last for what elsewhere would be a normal length of time. This is related to ignorance as regards maintenance of such machines. Suppliers, in most cases, have nothing to do with maintenance and repairing as they only provide parts. Hence, private technicians have been on the scene. They charge too much because of the absence of competitors. This has drawn a number of farmers from their holdings to settle in the city and start repairing pumps. These so-called 'native technicians' have no previous education or skill, except for operating and maintaining their own pumps. Accordingly, apart from the common make they used to re-

pair, all other makes are beyond their skill, but these activities are not prohibited.

Other than pumps, very few machines are seen in the agricultural area of the Amirate of At-Taif. The two most widespread are tractors, and tractor-drawn ploughs. A handful of cultivators, however, can obtain these machines. Accordingly, the majority used to hire them from the Ministry of Agriculture and Water office in At-Taif city. This service was offered on the basis of hourly hire at nominal prices. Also, it was obtainable from private establishments, but at higher prices. However, by April 1973, the Ministry of Agriculture and Water had abolished this service. Its machines were sold at half price to agricultural co-operatives, and at 70% of their value to hire establishments and cultivators.

Instead, the Ministry pay 45% of the price of machines purchased by agricultural co-operatives. If the purchaser is a cultivator or a hire establishment, 25% of the value will be paid. By doing this, the Ministry of Agriculture and Water will concentrate activity on co-operatives and strengthen their position. This is better understood when we see that it provides 25% only of the machine's value if purchased by cultivators or hire establishments, in comparison with 45% for co-operatives.

Types of Farming

Until recently, four principal types of farming could be distinguished in the agricultural area of the Amirate of At-Taif. These were cereal growing, fruit growing, vegetable growing, and livestock production.

By the mid 1960's, a fifth principal type had emerged - poultry breeding. Originally, this variety of product was supposed to provide basic food requirements for the local inhabitants only, mainly the cultivators themselves. At this time, transport facilities were limited and urban centres were small. This situation could be seen better in areas far removed from the urban centre. Accordingly, the variety of products of each holding was governed more by requirements of the cultivator's family, rather than by external demand. However, with the improvements in transport and communications, a relationship between certain products and external demand has grown. But again, this is to be seen more extensively in well-sited holdings. At any rate, the principal types of farming in the study area are:-

A. Cereals

Cereals are grown in the study area, mainly for the consumption by cultivators themselves. Accordingly, only a small proportion finds its way to the market. Cereals of different varieties are found in different parts of the Amirate, at different seasons. For example, while wheat and barley are the principal crops in winter, sorghum and millet take over in summer. The cropped area is closely affected by the availability of water in different seasons. In winter, there is enough rain for dry farming and the capacity of wells is more reliable. In summer, however, the case is rather different. The amount of water gathered in wells is just sufficient to keep the fruit trees alive. Hence, it is noticeable that they are grown around the wells, thus leaving distant plots free for growing non-tree crops. At any rate,

the area cropped in winter totalled (1967) 1,501.0 hectares (Table 7.5). That cropped in summer was 26 hectares only. Out of the 1,501.0 hectares cropped in winter, 819.0 hectares were irrigated and 682.0 hectares were dry-farmed.

Within the Amirate's three sub-agricultural areas, 751.0 hectares or 50% (out of 1,501.0 ha) grown in winter and 20.0 hectares, or 76.9% (out of 26.0 ha) grown in summer are to be found in the uplands. This is related largely to favourable climatic conditions. The agricultural produce of the foothills resembles that of the plain rather than that of the uplands. This can be illustrated by comparing the size of their cropped areas, particularly those irrigated in winter. This is to say, while 329.0 hectares (40.2%) are cropped in the foothills, 305.0 hectares (37.2%) are cropped on the plain. The size of dry-farmed areas are completely different, as only 6.0 hectares (0.9%) are cropped in the foothills, compared with 110.0 hectares (16.1%) on the plain. This is related largely to the seasonal involvement of semi-nomads. During winter, some of these people practise (in addition to grazing) dry farming. It is related partly to the fact that the attention of foothill cultivators is focussed on growing vegetables. The uplands area has, during this season, a low yield of vegetable produce - a result of less favourable climatic conditions.

Threshing time is a communal gathering that involves female labour too. Sometimes, poor semi-nomads are asked to participate. In return, part of the harvest is given to them, known locally as shokod. Furthermore, the harvest owner has either to give every participant some of the grain or feed them all. These traditions are

TABLE 7.5

Hectares Per Crop in the At-Taif Agricultural Sub-Areas, 1967*

Crops	Uplands	%	Foothills	%	Plain	%	Total	%
Palms			7	4.5	150.0	95.5	157.0	100
Vines	32	14.8	130	60.0	54.5	25.2	216.5	100
Pomegranates			106	75.2	35.0	24.8	141.0	100
Citrus			17	89.5	2.0	10.5	19.0	100
Other fruits	134	85.6	19	12.2	3.5	2.2	156.5	100
Prickly pears	139	86.3	18	11.2	4.0	2.5	161.0	100
Alfalfa			111	77.1	33.0	22.9	144.0	100
Irrigated winter cereals	185	22.6	329	40.2	305.0	37.2	819.0	100
Dry-farmed winter cereals	566	83.0	6	0.9	110.0	16.1	682.0	100
Summer cereals	20	76.9	6	23.1			26.0	100
Winter vegetables	9	6.7	90	67.2	35.0	26.1	134.0	100
Summer vegetables	93	39.5	122	51.8	20.5	8.7	235.5	100
Total Cultivated Area	1,178	40.8	961	33.2	752.5	26.0	2,891.5	100
Uncultivated	1,252	44.6	224	8.0	1,332.5	47.4	2,808.5	100
Total Agricultural Area	2,430	42.6	1,185	20.8	2,085.0	36.6	5,700.0	100

* The agricultural lands of Eshairah are excluded

Source : Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, second scale of studies, 1967

still in existence because machinery has as yet not become widely used. Threshing takes place in the village/holding threshing place, known locally as jareen (Plate 7.4). It is completed by the movement of animals over the harvest, and is followed by throwing the grain in the air so that grain only falls to the ground. Accordingly, the threshing place has to be well sited, always exposed to the prevailing wind. Finally, it is pertinent to add that the Government aims to encourage cereal farming, and has issued (early 1974) a special aid programme. As a result, farmers producing wheat are eligible to receive in cash £0.02½ for each kilogram of wheat they produce. This will certainly increase the acreage under cereals.

B. Fruits

It is the fruit of At-Taif Amirate which created its well-established agricultural reputation. Its fruits, as well as being of good quality, are available in many varieties. On the one hand, fruits of the north-eastern portion of the Middle East (peach, apricot, plum, fig, vines, pomegranate and quince); on the other hand, fruits of the southern portion of the Middle East in contrast, date palms, come naturally at the top of the list. However, as seen in Table 7.5, fruit plantations occupy (1967) an area of 851.0 hectares. Vines come first as regards the area covered, 216.5 hectares. They are followed by prickly pears (161.0 ha), date palms (157.0 ha) and pomegranates (141.0 ha).

Different fruits are to be seen concentrated in each of the Amirate of At-Taif's three agricultural sub-areas. This is obviously based on different climatic conditions. For example, while date palms



Plate 7.4

Two views of a threshing place

Al-Lawamiyah village on Wadi Mihrem, north-west of At-Taif
city

Page 236

are concentrated on the plain (150.0 ha, or 95.5% of the area cropped by date palms), none are to be seen on the uplands. On the contrary, prickly pears are concentrated on the uplands (139.0 ha, or 86.3%), while only 4.0 hectares, or 2.5%, exist on the plain. As far as the foothills are concerned, vines and pomegranates take the lead - 60.0% and 75.2% respectively of the area cropped by these fruits in the Amirate of At-Taif.

But, although there is a wide variety of high-quality fruits, production met only part of the growing local demand. It is estimated (by Italconsult) that fruits (excluding dates) produced in Makkah-Jeddah-At-Taif area in 1967 met only 22.0% of demand. This is because, while the fruit consumption rate is increasing constantly (through changing diets and rising standards of living), fruit production is not increasing. This hypothesis is based on personal observation and investigation. The overall situation has necessitated continuous importation of foreign fruits, not only from nearby Lebanon, but also from as far away as Australia.

C. Vegetables

Two principal factors have directed farmers' attention towards growing vegetables. The first is the constantly high demand at reasonable prices for fresh vegetables. The volume of demand has increased remarkably by the proximity of three major urban centres : Makkah, Jeddah and At-Taif (all within an hour's distance by road from each other). All their inhabitants are vegetable consumers. The second factor is the favourable growing conditions offered by climatic differ-

ences. Hence, it becomes possible to supply the market with a wide variety of vegetables at all seasons. However, the area given over to growing vegetables in the Amirate of At-Taif (Eshairah agricultural area is excluded) in 1967 totalled 369.5 hectares - 134.0 hectares for winter vegetables and 235.5 hectares for summer vegetables (Table 7.5).

The foothills produce vegetables before the other two agricultural sub-areas (the uplands and the plain). For example, it has 212.0 hectares of vegetables compared with 102.0 hectares in the uplands and 55.5 hectares in the plain. This improvement, however, could be related to (a) its favourable climatic conditions both during winter and summer, and (b) to its situation as regards area of consumption and distribution : the city of At-Taif. The value of the first point can be illustrated by comparing the size in area of cropped vegetables in winter and summer in the uplands (9.0 hectares in winter, and 93.0 hectares in summer) and in the plain (35.0 hectares in winter, and 20.5 hectares in summer). Furthermore, while wheat, barley, lentils and fenugreek replace summer vegetables in the uplands during winter, winter vegetables replace summer vegetables in the foothills. During winter, then, the vegetables are cauliflower, cabbage, carrots, peas, garlic, onions, lettuce and turnips. During summer, the following vegetables become dominant : cucumber, okra, marrow, tomatoes, egg plant, green beans, chillies and green peppers.

But, as was the case with fruits, vegetable production is not sufficient for local consumption. Hence, imported vegetables are seen in the market. During 1967, it was estimated by Italconsult that the

local vegetable production in the Makkah-Jeddah-At-Taif area met only 47% of the total demand. Accordingly, the Government represented by the Ministry of Agriculture and Water is trying to encourage farmers to pay more attention to vegetable growing. One of many encouraging schemes is to sell nursery plants, such as tomatoes and green peppers, at nominal prices - £0.25 for a thousand. These are offered for sale by the Ministry nursery at Al-Kedairah to the north of At-Taif city.

Obstacles Facing Crop Production *

There are several features that may be considered obstacles blocking the path of cereal improvement and fruits and vegetable production. The most important obstacles are:-

1. Marketing

What increases the difficulty of marketing is the fact that the producers do not get involved. Also, they know very little about it. A producer generally brings his produce to a special place in the city of At-Taif where, after dawn every day, auctioneers sell it for the highest offer. Buyers are usually retailers in At-Taif city or exporters to the cities of Makkah and Jeddah. Both obviously know much about levels of demand in consumption areas. This is important because part of At-Taif Amirate's produce is carried outside it. For example, according to a rough estimate carried out by Italconsult in 1967, 35% of grapes, pomegranates and tomatoes were carried to Makkah, 25% to Jeddah, and hence 40% remained on At-Taif's market.

* This section is placed here following those on crop production. The sections on livestock and poultry, completing the review of types of farming, begin on page 243

Apart from the refusal of low offers, no other options are left open to farmers. This is the case because most products cannot wait another day in order to gain a higher price, because of the perishable nature of the produce, increased by high temperatures. Anyway, producers prefer to get what they can as soon as possible. After all, why should they refuse what God has offered them! Yet, if we assume that a farmer has decided to spend a day and night in the city of At-Taif for this purpose, sleeping in a coffee house, in addition to other daily requirements for which he has to pay, it will certainly cost him more than if he had left earlier. The overall result is that he earns little by selling his products. The case looks even more grim because of the lack of any organisation or co-operation in agricultural production between farmers. This is to say they all supply the market at once with one similar product. Hence, supply outweighs demand and, as a result, prices fall. Absence of storage facilities, for instance, has restricted control of supplies.

2. Transportation

Clearly, easy access to the consumption and distribution area (the city of At-Taif) can be considered as an important factor for evaluating the degree of prosperity of agricultural holdings. As mentioned previously, the uplands and the foothills of At-Taif Amirate are its best agricultural areas. But, unfortunately, they comprise a rugged terrain. Accordingly, access to a wide part of these areas is difficult. Hence, road transport has always been a matter for concern, and a problem facing the producer in marketing his output. As seen

in Figure 7.3, asphalt roads built in or across the study area are made solely to connect main urban centres throughout the country, mainly for administrative, political as well as cultural purposes. Thus, connecting the rural area, which is mainly agricultural, is considered of secondary importance. Nevertheless, there are at present two projects to asphalt (a) the road to Ash-Shafa district in the extreme south-west of the study area, and (b) the road that crosses the settlements of As-Sail Al-Kabir and As-Sail As-Saghir (north of At-Taif city) and runs to the holy city of Makkah. The purpose behind the first project is to make an easy access to the most beautiful resort in the Amirate. The second road, however, was planned with different intentions (see pp 185-186).

These two roads, although not built primarily for agricultural purposes, will definitely improve the situation by connecting or approaching agricultural holdings. However, the present earth roads (they are known as agricultural in Saudi Arabia) are rough and unsurfaced, but serviceable (Plate 7.5). Discontinuous maintenance, in addition to rain, may very quickly affect their quality. Hence transport costs are comparatively high, and the low quality of such roads reduces the quality of products, for they need careful handling.

3. Social Considerations

This is the third principal factor which has affected the quality and quantity of cereal, fruit and vegetable production in the Amirate of At-Taif. Naturally, as the area came to know advanced agriculture well before the rise of Islam, it could be said that beliefs, traditions and customs are all deeply rooted. For example, farmers still believe

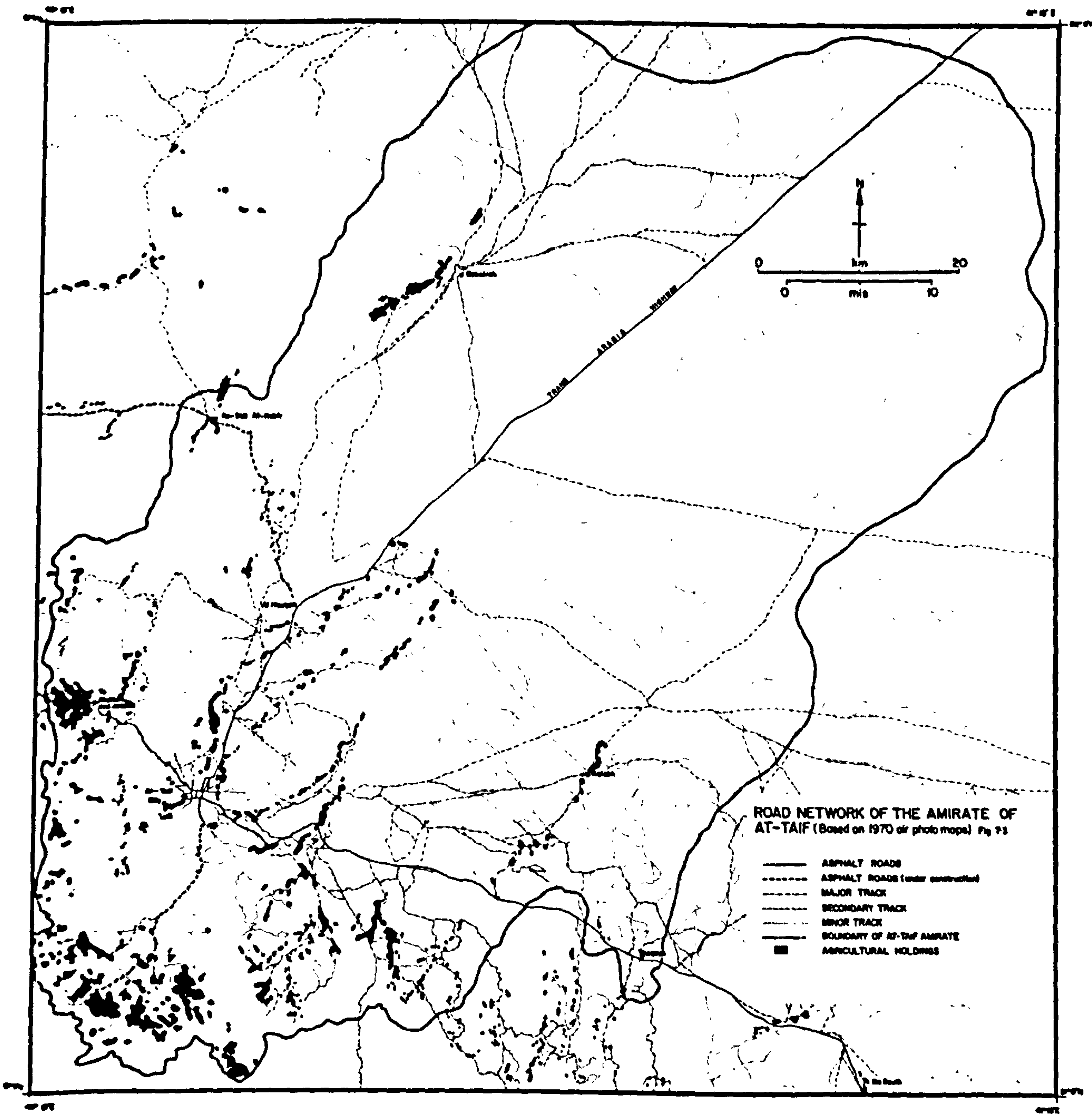




Plate 7.5

Earth roads in At-Taif Amirate

(a) The road to upper Wadi Thamalah

(b) The road to Al-Wohait on Wadi Wiji

Page 241

that placing a clear stone (composed almost entirely of quartz) when planting an apricot tree will increase its growth and hence its quality of fruits. Also, to hang the same stone on the same tree prevents the evil eye. However, when Saudi Arabia became open to technology (because of oil wealth) and streams of agricultural advisors and instructors arrived from abroad, the matter became more complicated for the farmer. As a matter of fact, he is not used to such advice and recommendations; even their language and dress are unfamiliar to him. Is he to follow these foreigners, or keep to what his parents or clan have taught him? Accordingly, it is the success or failure of the first experiment that matters the most. But unfortunately, here again corruption and misunderstanding have intervened. For example, farmers in the study area have been told about the usefulness of using poultry manure for fertilising. This fertiliser is available from seven major incubators - poultry breeding stations in the study area (604,698 fowls on 3rd October 1972) - at £0.12 per sack (Plate 7.6). The experiment succeeded and subsequently the demand increased. However, I have seen in Al-Qosran village (on the mountains north-west of At-Taif city) heaps of sawdust on basins ready for ploughing into the land (Plate 7.7). It was only when I asked the farmer what this was that I discovered that it was supposed to be poultry manure - but only about 10 to 15% of it was actually poultry manure, the rest being sawdust. The farmer had been tricked by this low-priced 'manure' (£2.40 per cubic metre) in comparison with animal manure (£3.50 per cubic metre). Hence the Government is subsidising chemical fertilisers, both local and imported, by supplying 50% of the total cost.



Plate 7.6

Sacks of poultry manure offered for sale by a poultry breeding station near At-Taif city

Page 242



Plate 7.7

Heaps of sawdust mixed with poultry manure on ground ready for ploughing

Page 242

D. Livestock

Many farmers in the study area are increasing the numbers of their livestock. They have been encouraged to do so for a number of reasons:-

- (a) The comparatively low returns offered by practising agriculture.
- (b) Livestock keeping requires less effort than agriculture.
- (c) Constant increase in meat prices.
- (d) A 'healthy' market in the nearby three major urban areas (At-Taif, Jeddah and Makkah, with a population total of 788,000 persons)* in addition to the vast market provided in the pilgrimage season.**
- (e) The land, in most cases, can be considered suitable for grazing.
- (f) Women are not prohibited from rearing herds, and wool is turned by them into a rough reversible carpet, known locally as shamlah. Extra income is thus also obtained by producing cheese and cooking butter.

One final outcome is that farmers, by directing more attention to stock rearing, are becoming increasingly like the urban and semi-nomadic population of the study area.

* Robert Matthew, Johnson-Marshall and Partners, Socio-economic survey of Western Province, 1971

** See p 191, Chapter 6

Figures of livestock kept by farmers in the Amirate of At-Taif are only available from the study carried out by the consultant firm, Italconsult, during May-December 1967. According to this study,⁵ farmers in the Amirate of At-Taif (apart from Eshairah and its surroundings in the extreme north of the Amirate) have 11,530 sheep, 5,840 goats and 990 cattle, in addition to small numbers of other domestic animals such as camels and donkeys. These figures show, as expected, the dominance of sheep rearing. This is an outcome, however, of the high demand for mutton and wool. Goats, on the other hand, numbered just less than 50% of the total number of sheep. They produce less wool, and their meat is in less demand. However, these animals are to be seen more in the mountainous parts of the study area than elsewhere, for the simple reason that they are well adapted to rugged terrain. As far as cattle are concerned, their low number (990 head) can be related to the fact that these animals need plenty of grass to feed on, and this is either not always available or expensive to obtain. Also, beef is less in demand in the study area than lamb or mutton. Supplying the urban area with fresh milk is something which is as yet unknown in the Amirate of At-Taif.

The Government, in order to improve the situation, has on the one hand established a Range Management Centre. Its aim is to study range and livestock management problems in the country. On the other hand, the Council of Ministers' Resolution (no 731, dated 19th June 1974) presented the Ministry of Agriculture and Water and the Agricultural Bank with a programme to aid farmers and others to purchase and breed cows, for the production of milk and dairy products. According

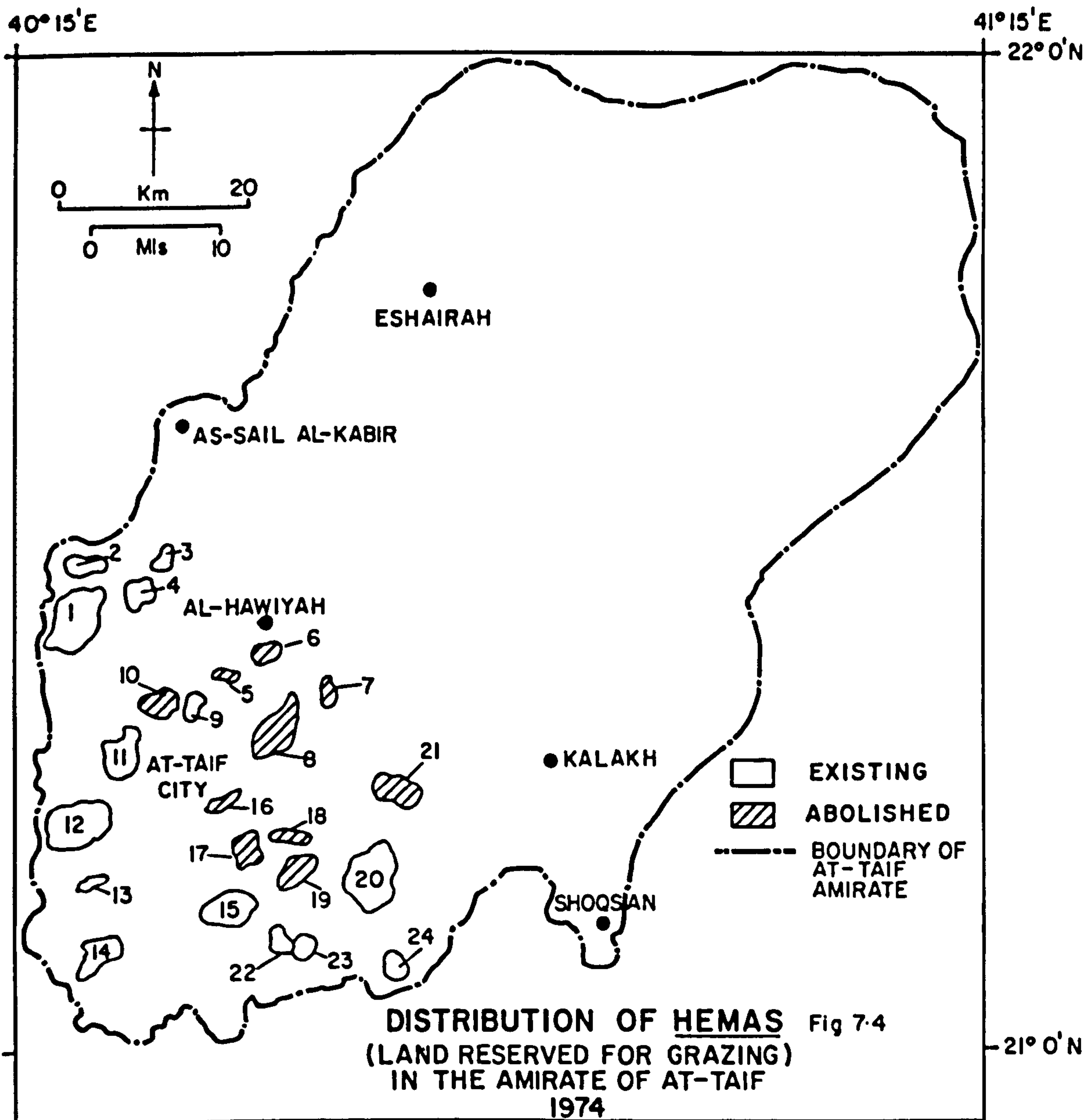
to the programme, the Ministry and the Bank together will buy, on the purchaser's behalf, the cows from abroad, and meet the costs of air flight. Hence, the purchaser need only meet the original value of the cow in the country of origin. The Agricultural Bank will provide the loans (without interest) to the purchasers. Also, the Government will grant 45% of the value of automatic milking machines. But it appears that almost all the farmers in the study area will not benefit from this programme, because the purchaser must buy at least 200 head of cattle. The opportunity will be seized probably only by interested wealthy people in the urban area.

This has been so much so that farmers are concentrating on sheep and goat rearing which has resulted unfortunately in overgrazing. This has been increased by the frequent movements of the semi-nomads around agricultural holdings and by complete range mismanagement. Accordingly, palatable perennial grasses have almost disappeared and hence very little grazing is available. Farmers themselves had acknowledged this problem long ago, even before the rise of Islam. The solution they adopted was to establish special places, each known as hema. They are reserved and restricted places for grazing, either seasonally or permanently, for a particular animal or for all animals. Apart from that, only permitted persons can cut the hema's grass with the use of a sickle. These places are always situated in favourable sites within each tribal or sub-tribal area of influence. Accordingly, the hema system has become dominant in the study area. There were originally 24 of these, but by 1935 a committee arranged by a royal order (no 8395, dated 5th October 1935) had abolished many of them,

particularly those without title deeds. Another order (no 13324, dated 11th December 1953) abolished hemas owned by the Government (discussion of these orders and their results lies beyond the scope of this study). However, only 14 hemas remain in the Amirate of At-Taif. Figure 7.4 shows the distribution of all hemas in the study area, while Table 7.6 shows their characteristics.

E Poultry

Hens are the dominant type of fowl kept by the farmers of At-Taif Amirate. They supply the farmer with eggs and meat which he may consume but usually sells in the urban area. These fowl are of local breed and are much smaller than the regular hen, though they produce a daily yield of small eggs. Apart from foreign competitors, there are almost no others in the study area to supply the city market with chickens and eggs. But, although imported chickens and eggs look healthier, the majority of people do not like them. This is because oven-ready chickens are believed not to have been slaughtered according to Islamic rules. Eggs, because of the time which passes before they reach the consumer and the high temperatures, used to have an offensive smell. This was the case up to the mid 1960's, and it attracted the attention of a few businessmen because of high demand and prices. The suitable climate and position of the study area have further encouraged them to alter the situation. Accordingly, by August 1973, there were seven major incubator-poultry breeding stations in the Amirate of At-Taif, all owned by city businessmen and managed in a highly mechanised manner. They accommodate 556,077 chickens and 48,621 laying hens.



1 AN-NOMOOR
2 SHABAN
3 AL-HAZM
4 TOWAIRO
5 AL-KEDAIRAH
6 AL-HALQAH
7 AR-REFAIDAH

8 SAISAD
9 AL-HEMADAH
10 MASARRAH
11 KORAISH
12 BANI AMR
13 AL-MAHDHAM
14 AL-MATHAMENAH

15 AL-HA YAFEEN
16 AS-SADAD
17 AUF
18 ANQAN
19 KORAIIDHAH
20 GAFFAR
21 AL-MAZHAR
22 THAMALAH
23 NAQEEB
24 SAKHAYIT

Partly after Al-Hosaini, A.

TABLE 7.6

Characteristics of Hemas (Land Reserved for Grazing) in the At-Taif Amirate

No	<u>Hema</u>	Owner	No of Benefited Animals (approx)	Animals	Status
1	An-Nomoor	An-Nomoor	2,000	Cows, donkeys	
2	Shaban	Sofyan	500	"	
3	Al-Hazm	Sharif Fawwaz	?	?	
4	Twayriq	Twayriq	700	Cows, donkeys, camels	
5	Al-Kedairah	Ahl Al-Kedairah	?	?	Abolished
6	Al-Halqah	Sharif Homood	?	?	Abolished
7	Saisad	Government	?	Formerly for horses & camels	Abolished
8	Ar-Rifeidah	Ahl Ar-Rifeidah	?	?	Abolished
9	Al-Hamdah	Al-Hamdah	900	Cows, donkeys, camels	
10	Masarrah	Government	?	?	Abolished
11	Koraish	Koraish	300	Cows, donkeys, camels	
12	Bani Amr	Sofyan	?	?	
13	Al-Mahdham	Al-Karadhah	200	Cows, donkeys camels	
14	Al-Makhadhah	At-Talhat	?	Bees	(Restricted to bees during spring only)
15	Al-Hayafeen	Al-Hayafeen	?	Cows, donkeys, camels	
16	As-Sadad	Ash-Shanabrah	90	?	Abolished
17	Auf	Auf	150	?	Abolished
18	Anqan	Al-Fouwr	300	?	Abolished
19	Koraidhah	Bani Salem	400	?	Abolished
20	Ghaffar	Al-Jehadah	?	Bees	
21	Al-Mazhar	Ath-Thebatah	?	?	Abolished
22	Thamalah	Thamalah	700	Cows, donkeys camels	
23	Nakeeb	Abbasah	500	"	
24	Sakhayit	Ath-Thebatah	300	"	

Source : Al-Hosaini, A, Survey of At-Taif's Hemas, 1963, pp 4-15
(Manuscript, Arabic)

These 604,698 fowls supply the markets of the cities of At-Taif, Makkah and Jeddah with about 7,000 chickens and 45,000 eggs a day. The Government, to encourage increased production, is paying 50% of the total cost of feed for these fowl. However, these fine-looking chickens and large eggs (supplied by these stations) have definitely reduced the demand for the local farmers' chickens and eggs - both small in size. Imported, oven-ready chickens and eggs must have been ultimately affected. There are no data, however, to support this hypothesis, based on almost complete absence of farmers' chickens and eggs in the city of At-Taif poultry shops, and on other investigations carried out in the rural area of At-Taif Amirate.

Irrigation

Apart from the area fed by rain or that much smaller area which is irrigated by ains, the major share of At-Taif Amirate's agricultural area depends on well irrigation. The type of well irrigation adopted in the Amirate does not differ from that practised in the rest of Saudi Arabia. Simply, water is raised from the well by means of pumps and poured into a pond. From there, either before sunset or after dawn, water flows along narrow channels which criss-cross the area of the holding and irrigate each plot separately (Plate 7.3). Hence, it becomes possible to estimate the amount supplied by the well, for a small plot reflects the amount of water which the well can supply. However, apart from the upper parts of the channel network, which are directly connected with the pond, the rest of the network is made of earth, i.e., they are rebuilt every crop cycle. Losses along these unlined channels

are reported to be high. A precise study of the loss has been made by the foreign firm, Italconsult, and showed that there is an average of 10% loss for every 100-metre stretch of earth channels.

However, a feature worth mentioning is the existence of more than 12 ancient, enormous and magnificent dams in different locations in the Amirate of At-Taif. Hence, the Amirate is not equalled by any other area in Saudi Arabia as far as such irrigation works are concerned. These dams differ quite noticeably in their structure, size, state of preservation and date of construction. They testify to glorious days of better utilisation of water resources and land management. Two selected dams are described below, and their characteristics will definitely give a clearer view of the stage of progress reached and later lost, though hopefully not for good.

(a) As-Samallaqi Dam

This dam (Plate 7.8) is dated (according to a proved inscription on its face) to the period 661-680 AD. It is built across Wadi Thamalah, a tributary of Wadi Liyyah to the south-east of At-Taif city. It is approximately 100 metres long, 10 metres high and 15 metres wide. Large stones and boulders of granite were used in its construction, and burnt lime was used for mortar. No traces of plaster on either face or the top appears - perhaps they were washed away by the 13 centuries which have passed since its construction. The dam, however, is in perfect condition, apart from a broken spillway which has been enlarged by floods and further by traffic.

The most interesting feature in As-Samallaqi Dam is its newly-discovered irrigation system.⁶ There is a channel entrance on the

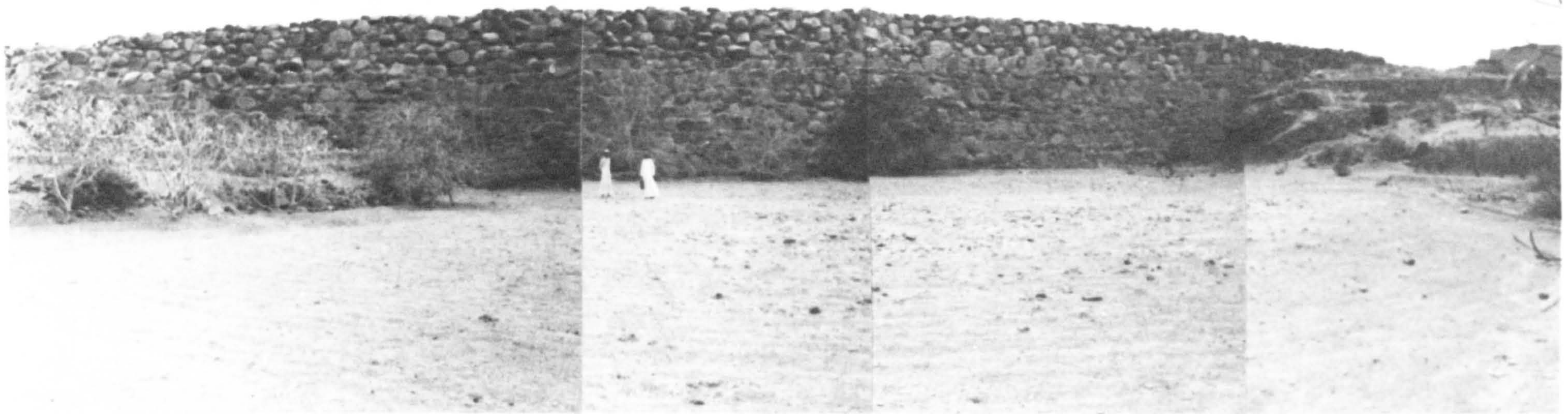


Plate 7.8
As-Samallaqi Dam, downstream face
Page 249

upstream dam face which leads to a circular masonry shaft. All are plastered and lined with burnt lime, while the top of the channel is covered by rock slabs. There is a sluice gate to hold back and control the flow of water. It operates by sliding up and down hewn rock slabs, perhaps with the help of a cable. It is also believed that the hole in the granite slab is for providing an air supply. However, a well sited about 100 metres downstream is connected with a channel which emerges from underneath the dam. The process, then, is that the dam is supposed to store and regulate the flood waters for the time and quantity required for irrigation. Nowadays, and after about 1300 years, the locals believe that those who built the dam were a vanished race of giants and were assisted by mysterious powers!

(b) Masarrah Dam

Masarrah Dam (Plate 7.9) is built across Wadi Masarrah, a tributary of Wadi Al-Qaim to the north-west of At-Taif city. Its construction date is not known, though it is believed to be not less than 600 years old. There is, however, a square mark on the right side of its upstream face which, I believe, marks a former inscription long since removed by neglectful people.

This dam is approximately 80 metres long, 9 metres high and 9 metres wide. As a result of lack of care and attention, Masarrah Dam has been broken in the middle, but the date of this destruction is unknown. This has provided a chance to see the way in which it was built. The upstream face, which is completely plastered with burnt lime, was constructed of large stones and boulders of granite, fixed together with burnt lime mortar. The same, except with the absence of plaster, was



Plate 7.9
Masarrah Dam, upstream face
Page 250

done for the downstream face, and perhaps also for the top. The size of stones becomes smaller towards the centre of the dam, and so builders built first of all two parallel walls (Plate 7.10) and filled between the two with masonry rubble (Plate 7.11).

It is not known yet if Masarrah Dam has a water distribution system similar to that described in the previous dam. However, downstream of both dams, there are signs of former land use, preserved in deserted wells and ponds. All are evidence of a more glorious past.



Plate 7.10

Building a dam. Two parallel walls are built first, and the size of stones becomes smaller towards the centre of the dam (Shoehorn gives scale)

Page 251

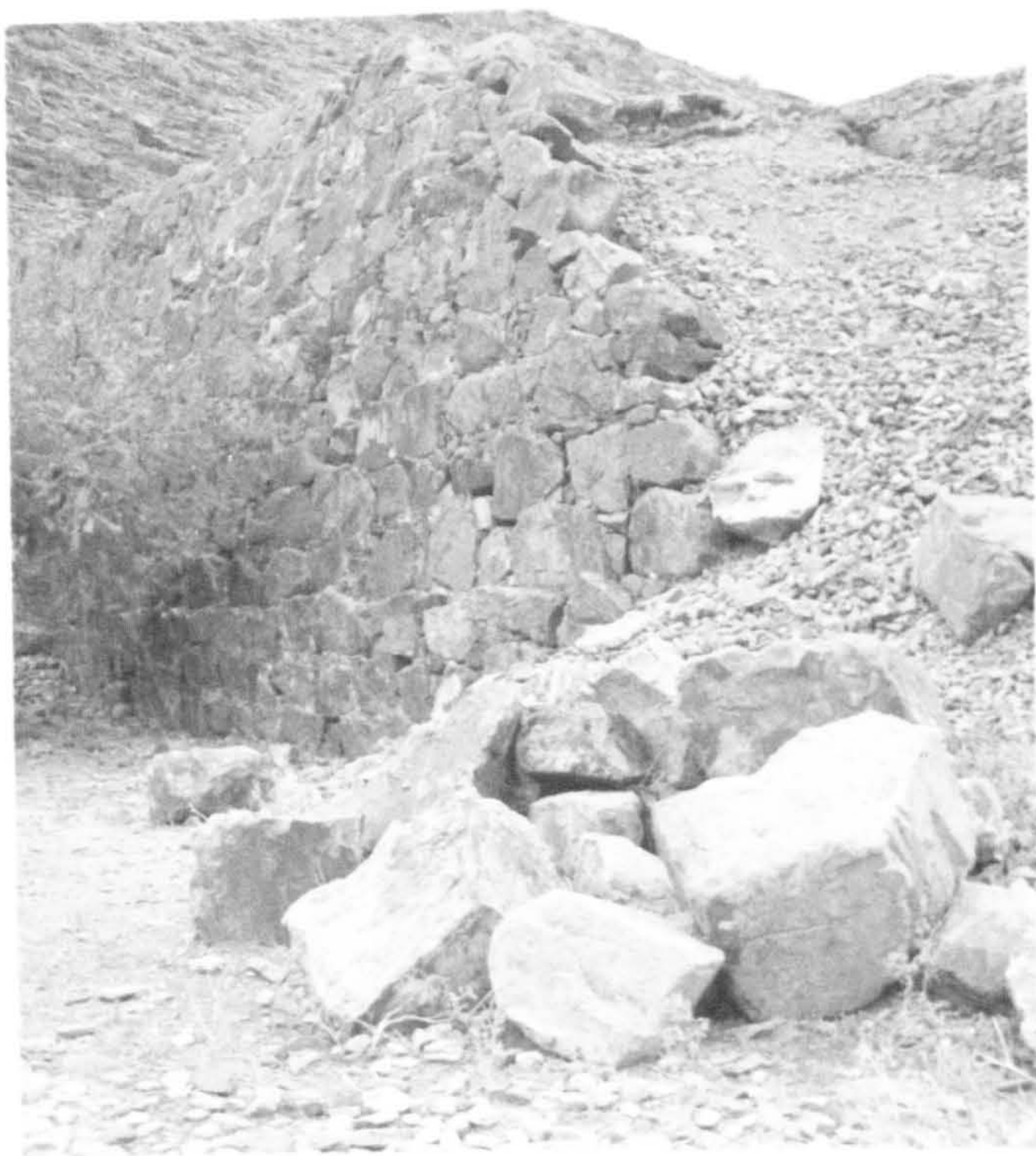


Plate 7.11

Space between the two walls is filled with masonry rubble

Page 251

REFERENCES

1. Ministry of Agriculture and Water, Agricultural Census of Western Province and Al-Madinah of 1962-63, Ar-Riyadh, 1964, p 23, (Arabic)
2. Yakut, Mojam Al-Buldan, vol 5, Beirut, 1957, p 386 (Arabic)
3. Al-Ojaimi, H, Ihda Al-Lataif min Akhbar At-Taif, Makkah, about 1878, p 45 (Manuscript, Arabic)
4. Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 9, Agronomic Investigations, Rome, 1968, p 56
5. Ibid, p 91
6. Gemmell, B A P, An-Nadwah Daily Newspaper of Makkah, No 4021, 4th May 1972, p 3. (Arabic)

CHAPTER 8

COMMERCE AND INDUSTRY

Commerce

The Role of Commerce in At-Taif Amirate

Like other services, the commercial activities of the At-Taif Amirate cluster in At-Taif city, confirming once more its central importance within its tributary area. This may be related to a number of factors.

1. Apart from At-Taif city's population, the inhabitants of the Amirate are almost all engaged in farming, animal rearing and other associated fields of activities.
2. As At-Taif city is the principal consumption and distribution centre for their produce, these people visit the city regularly.
3. In the city, they are confronted with a large number of shops with a wide variety of goods.
4. Frequent visits to particular shops has established a close relationship between shopkeeper and shopper.
5. All these foregoing factors have helped to create a virtual absence of shops beyond At-Taif city, apart from the few seen in the settlements of Eshairah, Al-Hawiyah and As-Sail Al-Kabir, and those in the summer resorts of Al-Hada and Ash-Shafa - a special case that will be dealt with later in this Chapter.
6. Being, then, a central place for farmers and pastoral semi-nomads who sell and buy, a summer resort of 33,000 visitors annually,

In addition to the growing non-productive component of its population (increase in demand for goods) all have developed At-Taif city in terms of central place theory, into a high-order marketing centre.

Complete reliance on shopping in At-Taif city by the extra city population has increased the volume of trade and business in At-Taif city. This matter can be traced as far back as 1814, when J L Burckhardt counted in this formerly commercial town about 50 shops - a low number attributable to the Wahhabi war.¹ A closer picture was made available by A S Pasha in 1883. According to him, this town of 400 houses and 2,000 inhabitants had 200 shops!² According to up-to-date data, At-Taif city occupies a leading place among Saudi Arabia's major urban centres, as regards the number of establishments* it contains. According to the 1967 census of establishments (conducted by the Central Department of Statistics), it had 3,374 establishments, a number that put At-Taif directly behind Ar-Riyadh, Jeddah and Makkah respectively. According to the 1971 census of establishments (again by the Central Department of Statistics), it was still in fourth position in the country, as there were 4,219 establishments. Further indication of the sphere of At-Taif's marketing influence may be measured from the

* "The establishment (other than those belonging to the Government and oil companies) is defined as a unit organised for specific kinds of economic activity at one location. Agricultural holdings other than poultry farms are excluded and so are all the vendors, hawkers, pavement sellers and taxi drivers, etc, who do not have fixed places of business".

Quoted from Central Department of Statistics, Statistical Yearbook, vol 4, page 173, Ar-Riaydh, 1968

fact that it contains a larger number of establishments than Al-Madinah city (respectively 3,374 and 2,962 in 1967, 4,219 and 3,545 in 1971), though the latter city has a larger total population (137,000 compared with 106,000 for At-Taif). * Therefore, it is not surprising to learn that 14.6% of At-Taif's employed persons of 15 years old and over (they make up 50.6% of its total population) are engaged in commerce. This is a higher percentage than in Ar-Riyadh (13.2%), but lower than for Makkah (18.2%) and Jeddah (16.2%) - all based on the 1966 official sample survey conducted by the Central Department of Statistics.

Several factors may underlie such a prosperous position and expanding commercial activities. They caused, however, not simply commercial expansion, but also changed the way in which goods are presented and sold.

1. The prevailing way of life is a factor of principal importance. The public do not think about the future in terms of saving and budgeting, neither in the short nor long term. Hence budgeting the family income, as for instance in English families, is something unknown here. Spending follows the philosophy lines of "asrof ma fi al-jaib, yateek ma fi al-ghaib", i.e., if you spend the money in your pocket, the unforeseen will replace it! This ideology has obviously increased the amount of money poured into the market.

2. The overwhelming wealth of the Government, which is increasing almost hourly, in addition to many programmes of aid and help, and almost complete absence of taxes, have turned the public increas-

* Robert Matthew, Johnson-Marshall and Partners, Socio-economic survey of Western Province, 1971

ingly away from saving. Why should they think about saving and hence restrict their expenditure as long as they have such a benevolent Government?

3. This belief has been increased by the fact that the present generation of Saudi Arabia has not faced economic crises or any danger caused by war. In other words, they have not had to 'tighten their belts', an experience undergone several times by the older generation. To these, complete internal security should be added - all have participated in stabilising commerce.

4. The increase in national income has meant a similar increase in currency in circulation, purchasing power, home consumption and goods offered for sale. Yet, an increase in standard of living coupled with integration with the outside world (particularly the West) have created new tastes and values - for example, by not only introducing Arabic music, but now also European music in the shops (only in a few ladies' stores are these to be heard, although the trend is catching on).

5. Finally, At-Taif city, because of its proximity to the pilgrimage sacred places, is involved (though less than Makkah, Al-Madinah and Jeddah) in the commercial boom caused by the annual pilgrimage. No figures are available as to the extent of this involvement, but an increase in the amount of goods offered for sale and volume of shoppers cannot pass unnoticed. It is estimated (by Robert Matthew, Johnson-Marshall and Partners) that pilgrims, both internal and external, spent during the pilgrimage of 1971 the sum of £66,113,000.

It is impossible to support what has been said above with data (all

based on personal observation and investigation) since they are, in the main, scanty. However, some relevant support may be gained by including figures and percentages on growth in number of establishments and their workers in At-Taif city during the period 1960-1971 (Table 8.1). This shows a constant growth in the number of establishments, at a rate that doubled the number of establishments between 1961 (1,107) and 1971 (4,219) approximately four times.

TABLE 8.1

Growth in the Number of Establishments and
their Workers in At-Taif City, 1960-1971

Year	Number of Establishments	%	Number of Workers	%
1960	989			
1961	1,107	11.9		
1962	1,300	17.4		
1963	1,570	20.8		
1964	1,834	16.8		
1965	2,179	18.8		
1966	2,706	24.2		
1967	3,374	24.7	5,743	
1971	4,219	25.0	7,572	31.8

Source : Central Department of Statistics, Ministry of Finance & National Economy, Census of Establishments of 1967 & 1971

The Suq of At-Taif City

As stated earlier, the commercial activities of the At-Taif Amirate cluster in At-Taif city. To be more specific, they are concentrated in one place in the city - the traditional suq. It occupies the core of the city and contains most of the quarters of Fooq, Asfal and As-Solaimaniyah - most of which used to be inside the city wall which was pulled down in 1947

(Fig 2.3). However, even though the city is expanding and the centre of gravity of the built-up area has shifted from this traditional core (see p 69), the suq still maintains its important trading position in the city - so much so that no other suqs have developed in competition. This centralisation of commercial activities is the result of a number of factors.

1. Shopping is considered by the whole population, but particularly by women, as a major form of recreation. As far as women are concerned, their presence in the suq is regarded as a normal occurrence. They enjoy being here because this gives them a chance to 'escape' from 'the four walls', i.e., the house. Accordingly, distance to the suq is not a problem, in fact the longer the journey to the suq and the more time spent there the better.

2. Such a state of affairs has dissuaded women from buying from shops located outside the suq, even if they are only a few doors away from their house, and even if these shops offer the same price for the same article. Thus, shops selling ladies' needs and requirements (such as cosmetics, shoes, clothes and haberdashery) are only seen in the suq.

3. Since buying family requirements such as food and household supplies is the business of the father, the sons or the servant (if there is one), grocers and the like are seen throughout the city. They are supposed to provide the population with their daily needs and hence save them from going to the centre. But this has not affected the concentration of grocers in the suq (for the cause mentioned in number '1' above), and particularly the main dealers, wholesalers and large grocers who supply not only the city population but also the population of the Amirate.

Such a wide scale of business has further drawn these to the suq, where the flow of shoppers/pedestrians is always high.

4. Another factor which tends to 'anchor' the suq in one place is that it is encircled by a ring road that has worked as a barrier for expansion beyond its bounds. Hence it is expanding within the core itself by taking over the remains of the old residential area.

Such concentration of commercial activities in the suq has caused less attention to be paid to shops located within its periphery. Thus, shops located there are either (a) left unoccupied, (b) rented very cheaply, (c) rented to Yemenis for residence, or (d) rented to be used as warehouses. This phenomenon is to be seen more exclusively in the western part of the periphery, known as Bab Ar-Ri, where I have counted, in 1971 and 1973, about 79 vacant shops, all approximately 100-200 metres away from the suq. However, the low level of demand has affected land prices too. Relying on data I gathered from estate agents, and checked by members of the city National Council to obtain more accurate results, a square metre of land appears to be worth (in £ sterling) :

	<u>1971</u>	<u>1961</u>
Good site in the suq	200-300	100-150
Moderate site in the suq	50-100	25-100
Bad site in the suq	5- 10	5- 10

So what has caused such difference in land prices within the suq area? Is it simply a matter of good and bad sites, or is there something else? As a matter of fact, it would appear to have been caused by different factors, which may become more or less powerful in place

and time.

1. Being traditional, the suq of At-Taif city differs rapidly in both accessibility, age and condition of building over short distances. This has resulted directly in the rise or fall in rents as well as land prices.

2. Therefore, the centre of gravity of the suq is not fixed in one place, i.e., it is movable. This can be understood through movements of different kinds of shops within the suq itself or even towards its peripheries. Two examples may be given here. (a) The movement of alfalfa and grass sellers as well as poultry and egg sellers from the suq to the periphery. Their move has been caused by the increase in rents, caused in turn by the increase in number and pressure exerted by the neighbouring cutlery and china sellers. (b) The movement of sellers of ladies' shoes, clothes, cosmetics and the like from the southern part of the suq towards the northern end, and these have been attracted by the availability of newly-built rows of shops. Their departure has resulted in many vacant shops in the southern part of At-Taif's suq (Plate 8. 1). Only a few of these shops have been re-rented to sellers of building material, hardware and paint.

3. Accordingly, the centre of gravity of At-Taif's suq has shifted entirely from the southern part towards the northern part. The latter part differs considerably as, for example, its shops are wider and have iron, or even aluminium shutters and roller blinds, while the southern part has wooden doors and padlocks. Furthermore, these new shops are glass-fronted with attractive displays and are illuminated by neon strips.



Plate 8.1
 Khan Al-Awkaf, an example of the traditional suq
 Page 260

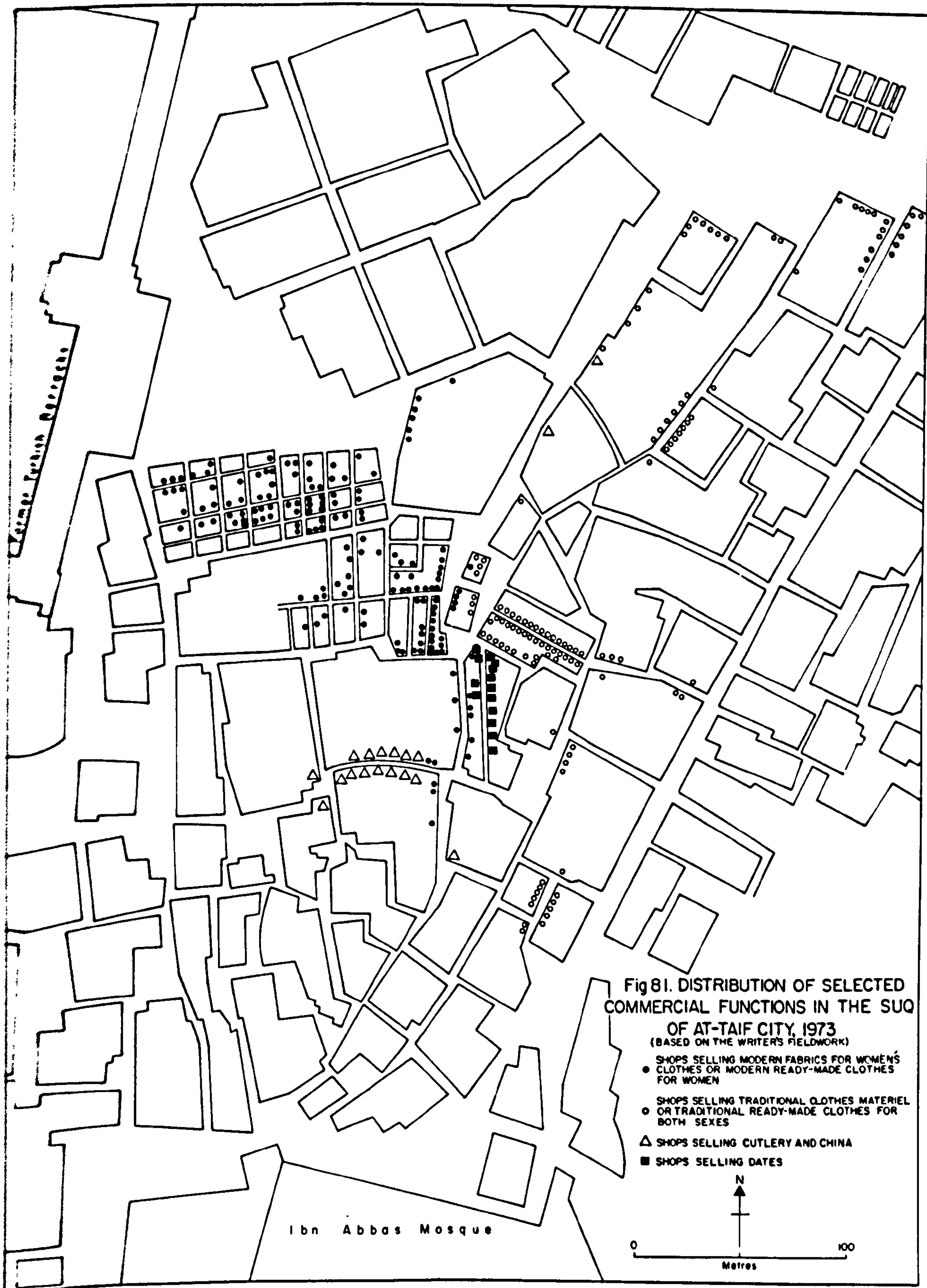


Plate 8.2
 Khan Al-Mofti, an example of the modern suq
 Page 264

4. The overall situation is that the suq of At-Taif city possesses over very short distances contrasting morphologies, contrasting standards of living, contrasting goods offered for sale and even the degree of cleanliness, tidiness and noise. Yet, throughout the suq non-availability of services and rear access are common features. All are discussed in some detail below.

Distribution of Commercial Functions in the Suq

It would appear from Figure 8.1 that there is a uniformity in the distribution of commercial functions in the suq of At-Taif city. This uniformity which perhaps began originally when members of one family, clan or community who performed the same sort of business preferred to have their shops close to each other, became with the passage of time common practice; and even now it is the basis of a well-established philosophy. This states that more will be sold and thus more profit will be gained if traders of the same article have their shops located in one place. As a result, there is noticeable pressure within the suq between different types of shops. Shops selling cheap goods are always the losers, as they cannot meet high rents. A previously mentioned example may be repeated here. The sellers of poultry and eggs as well as those of alfalfa and grass have been pushed off their lane by the expanding number of shops selling cutlery and china. Hence they left their shops located in the suq in exchange for cheaper shops at the suq's periphery - but even so the clustering still continues here. Another example may be taken from the clustering of popular restaurants in one place in the suq. Although they are supposed to serve primarily the day-time population of the suq area, they are



not spread through it evenly.

Before discussing the distribution of selected commercial activities in the suq, it should be mentioned that the size of shops is small, both in the old and the new part of the suq. This is the result of two different opposing factors. First, it is believed (from the landowners' point of view) to be more profitable to have many small shops on the site rather than a few big ones. This is the situation in reality if one takes into consideration the small size of the core of At-Taif city, which makes up the area of the suq. Second, it is believed (this time by shopkeepers) to be more profitable to have one small shop of a size that one person only can handle, rather than to have a large one requiring assistants. Furthermore, if he can afford to enlarge his shop and also to have an assistant, then this is an ideal opportunity to establish another small shop a few doors away, which will sell the same article. As a result, none of the shops located in the suq of At-Taif city approaches the dimensions of a department store or a supermarket. There are no figures, however, of the dimensions of shops, but it is perhaps related to supply data on employment size in establishments in At-Taif city (Table 8.2). As shown in the Table, 2,210 establishments (65.5%) in 1967, and 2,527 establishment (59.9%) in 1971, are only one person run establishments. It should be stated, however, that these figures do not represent (a) the suq only, but the whole city, and (b) they are establishments, not shops (see p 254). However, this shortcoming makes very little difference, because, to the investigator, the small size of shops located in the suq is quite obvious.

TABLE 8.2

Distribution of Establishments according to Employment Size

in At-Taif City, 1967 and 1971

Year	Employment Size										Total	%
	1	%	2-4	%	5-9	%	10-19	%	20-49	%	50-99	%
1967	2,210	65.5	1,035	30.7	110	3.3	13	0.4	5	0.1	1	0.0
1971	2,527	59.9	1,531	36.3	133	3.2	17	0.4	9	0.2	2	0.0
											3,374	100.0
											4,219	100.0

Source : Central Department of Statistics , Ministry of Finance and National Economy, Census of Establishments of 1967 and 1971

1. Shops selling modern fabrics for women's clothes or modern, ready-made clothes for women.

These shops are located almost totally in the new (1970 and afterwards) crisscross complex towards the north-west of the suq (Plate 8.2 and Fig 8.1). It has been especially attractive to traders as it is:-

- (a) covered, so it is protected against sun heat and rain,
- (b) paved,
- (c) located at a major entrance to the suq,
- (d) close to parking facilities,
- (e) more suitable for display purposes, as shops have a wider frontage.

These advantages, in addition to the appearance of glass-fronted shops with neon lights, have all attracted the inhabitants of At-Taif city and its summer visitors. Yet, the nearness of the cities of Makkah and Jeddah has allowed these shopkeepers to change their stock quite frequently, while the pilgrimage season always guarantees customers. This is important, as tastes towards a particular line change quite rapidly, and soon an article may be no longer desirable. Also, it is considered inappropriate, among the better-off city Saudi female population to appear at a marriage ceremony and other important occasions wearing a used dress, even if it has only been worn once.

2. Shops selling traditional clothes material and traditional ready-made clothes for both sexes.

These shops have not shifted, like the previous group, into the

new complex of the suq. Instead, they remain where they are in the heart of the suq (Fig 8.1), and their expansion has been accommodated in the shops vacated by the migrating group '1' and the few cutlery and china sellers. The new complex has not attracted them because of high rents, which they cannot afford. Furthermore, their goods, along with their customers, require no wide frontage or fine display (Plate 8.3). It is quite acceptable, for example, to display on the walls of the opposite building (Plate 8.4). This is in part attributable to the type of customers - all rural dwellers, semi-nomads and the low-income group of At-Taif city.

3. Shops selling cutlery and china, and dates

As shown in Figure 8.1, cutlery and china sellers are concentrated almost in the centre of the suq. This is, however, not their original site, as it used to be occupied, as stated earlier, by sellers of poultry and eggs, grass and alfalfa, who shifted towards the periphery of the suq. Originally, cutlery and china shops were located well into the centre of the suq where one shop actually remains. They have moved out of that site because shops selling traditional fabrics and haberdashers have taken over. The main causes are rent and space. In their present site, better chances of display and stock are provided. Yet, part of the stock is kept outside the shop, because this also is a means of display and attraction (Plate 8.5).

Sellers of dates are located again in the centre of the suq of At-Taif city, as shown in Figure 8.1. Their lane has no attraction for other commercial functions, as its shops are small and very old, in addition to being dirty and insect-ridden (Plate 8.6). It is either to

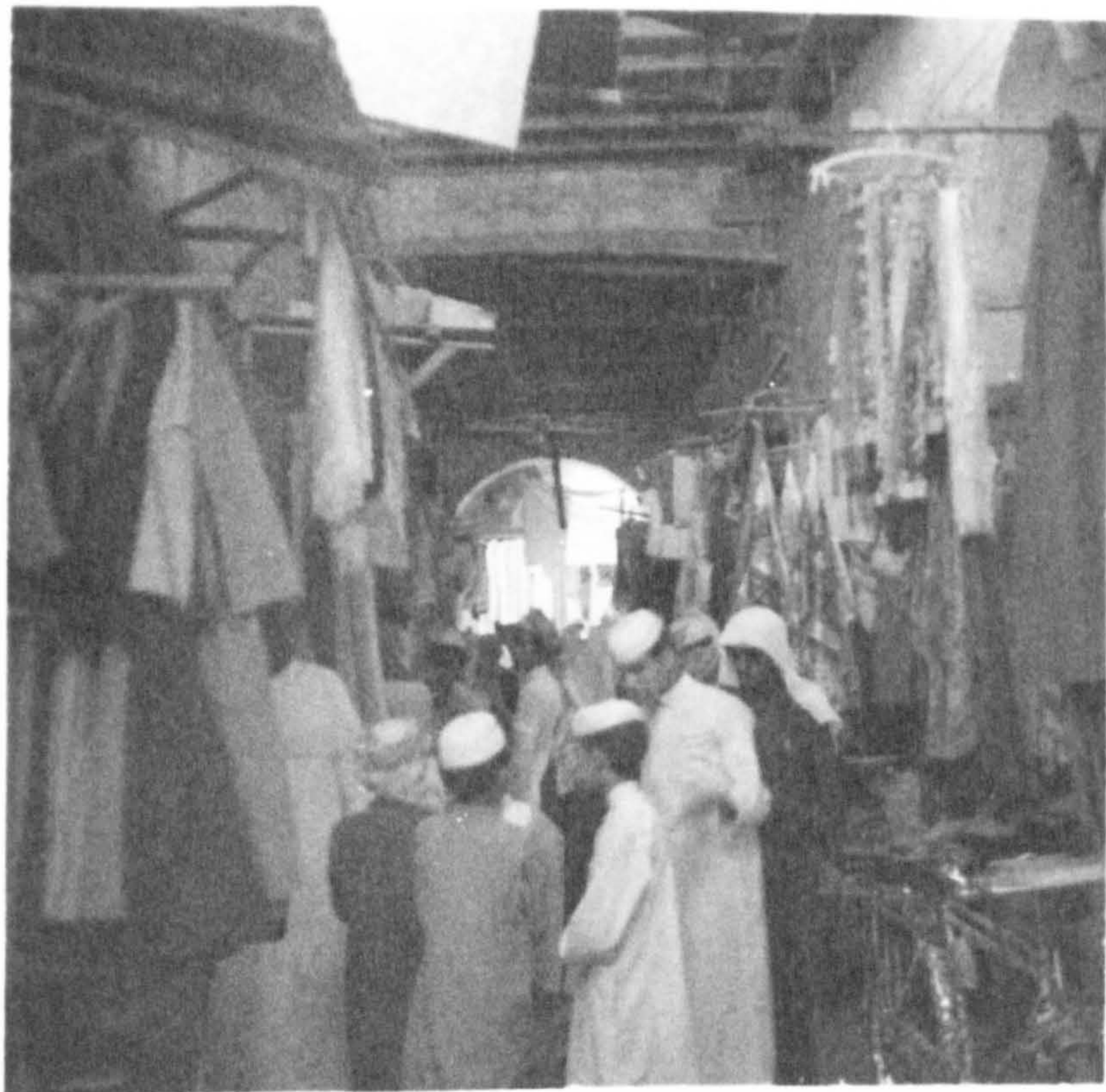


Plate 8.3

"Their goods, along with their customers, require no wide frontage or fine display". Khan Al-Kadhi
Page 265

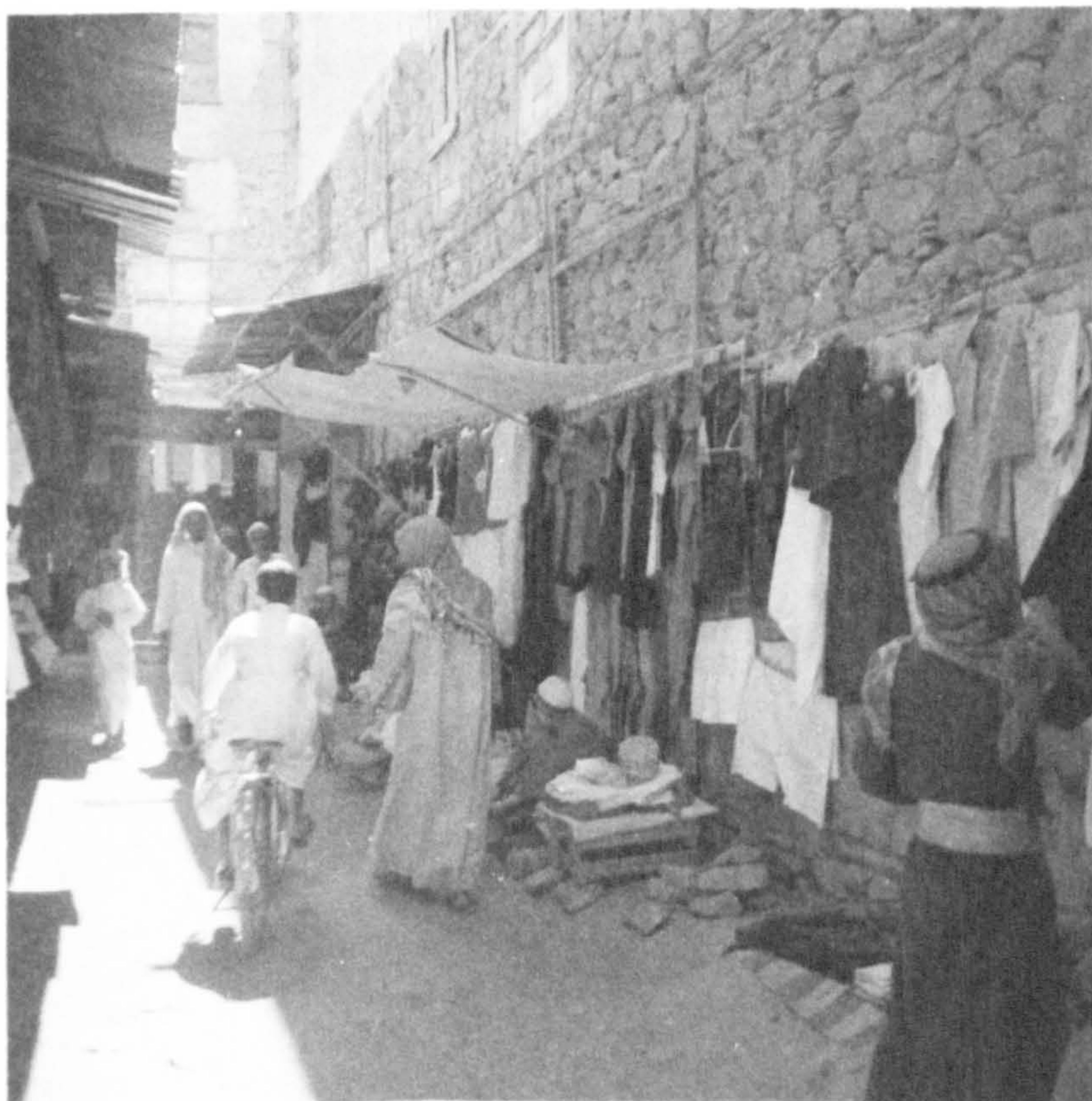


Plate 8.4

"It is quite acceptable, for example, to display on the walls of the opposite building". Opposite Khan Al-Kadhi
Page 265



Plate 8.5

"Part of the stock is kept outside the shop, because this is also a means of display and attraction."

Lane of cutlery and china sellers

Page 265



Plate 8.6

Lane of date sellers

Page 265

be demolished and rebuilt in a modern way or it will remain as it used to be. However, it has its own attraction for the city population who migrated from rural and semi-nomadic areas, as well as all rural and semi-nomadic populations of the Amirate. To them, dates are still a fundamental daily foodstuff. The fully urban population visits this lane during the month of Ramadan only, for then dates are regarded traditionally as a 'blessed' foodstuff.

4. Pedlars and pavement traders

These traders are an important element in the suq of At-Taif city. Their number is not known, but there may be, I believe, one thousand of them - a number that itself adds considerably to the suq's congestion. This congestion is more marked during afternoons, Fridays and throughout the whole visiting season, the summer. This provides an indication that some of them may not be engaged in full-time pavement trading. Half-day workers and employees and even students of poor families come into this category, in the hope that their earnings may be increased. Accordingly, it is true to say that all pedlars and pavement traders are people with low incomes, and this is the common belief of the population also. Such a belief has played an important role not only in protecting this element of commercial activity from decreasing or vanishing but also encouraging others to become involved. It is not surprising that these traders are closely watched by municipality inspectors who wish to clear the streets of congestion. But usually the passers-by themselves act as defenders for these traders. The situation occasionally reaches the newspapers, and most feel sympathetic towards them.

Pedlars and pavement traders, who may be Saudi Arabians or foreigners, are engaged in selling a wide variety of articles. A few examples are as follows : sticks and walking-sticks (Plate 8.7), cigarettes and matches (Plate 8.8), water (Plate 8.9), lahoh, a sort of unbaked bread of south-west coastal Saudi Arabia (Plate 8.10), aromatic plants (Plate 8.11), and haberdashery (Plate 8.12). Articles may be carried by hand, displayed on a wall or on a rug, in trolleys, carts, on tables, or trays.

Finally, it has been mentioned earlier that, although the suq of At-Taif has a distinctive appearance, and distinctive types of customers, etc., it lacks equally many fundamental things. For example, its alleys should be paved, and, more urgently, conveniences should be provided. These are, however, the responsibility of the city municipality - a body that has not only ignored vital projects but has also neglected to instruct architects who are responsible for private developments in the suq to take these matters into consideration. Architects, to please landowners, have also not considered building warehouses : shops and nothing else should be built on the sites in the suq. Accordingly, shopkeepers have been forced to rent houses located within the suq and poorly-sited low-rent shops for storage. The three-storey Bin Moammar building in the heart of the suq is used for such a purpose. An uncle of the writer was the first tenant in a newly-built block of flats at the periphery of the suq, but keeps the flat as a warehouse.

Nearness of warehouses is a matter of concern to shopkeepers. Its importance has been increased by the general small size of shops. Accordingly, a shopkeeper may bring supplies to his shop from his



Plate 8.7

Pedlars and pavement traders (pp 266-267)

(a) sticks and walking-sticks



Plate 8.8

(b) cigarettes and matches



Plate 8.9

(c) water



Plate 8.10

(d) lahoh, a sort of unbaked bread of south-west coastal Saudi Arabia

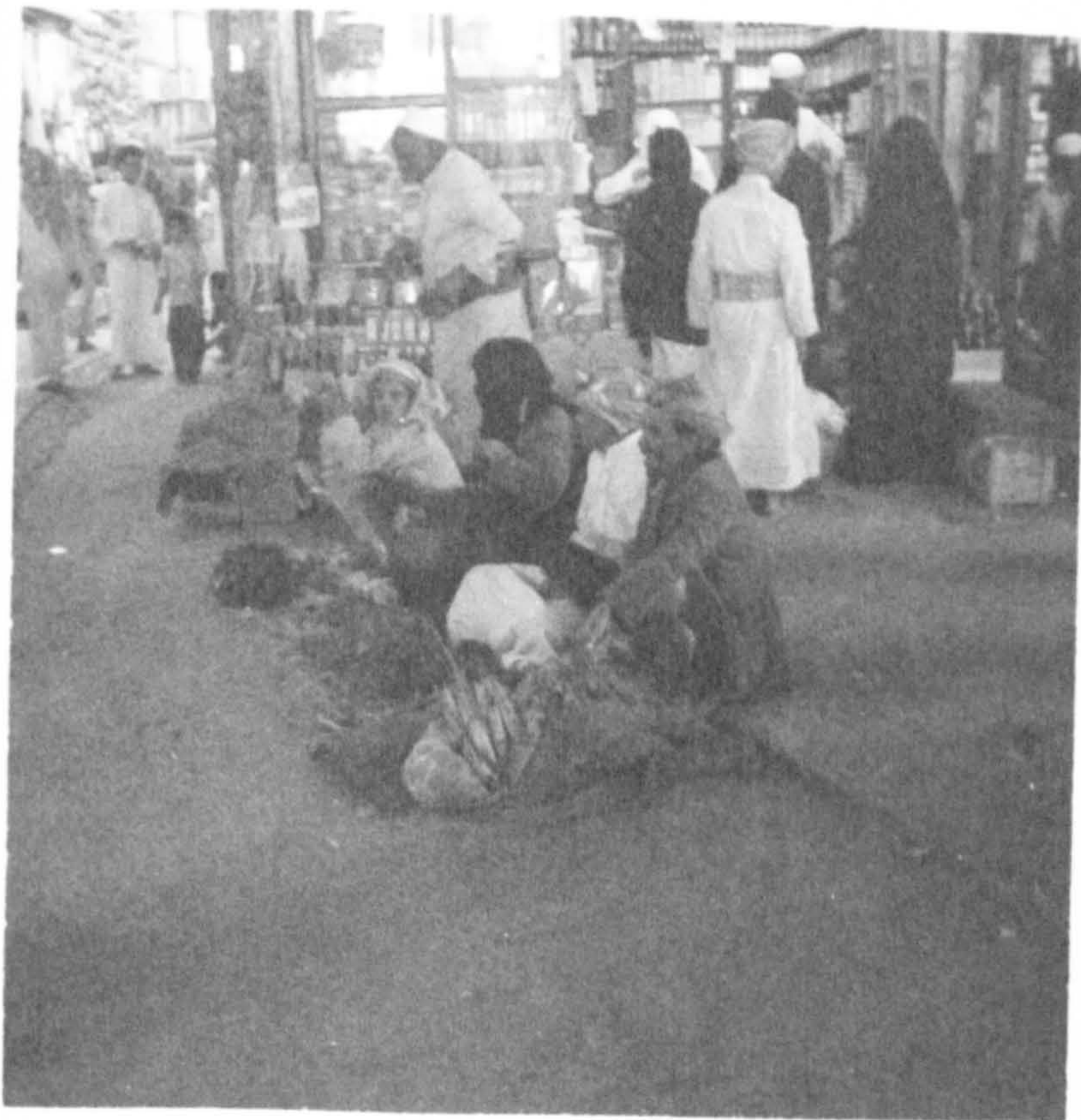


Plate 8. 11

(e) aromatic plants



Plate 8. 12

(f) haberdashery etc

warehouse as often as twice a day - probably during the noon and afternoon prayers closing-time. * Also a normal practice is for the purchaser to pay at the shop but collect at the warehouse. A final point is that, since these warehouses are not purpose-built, they lack rear access. But, this is something as yet unheard of in At-Taif city.

Commercial Streets

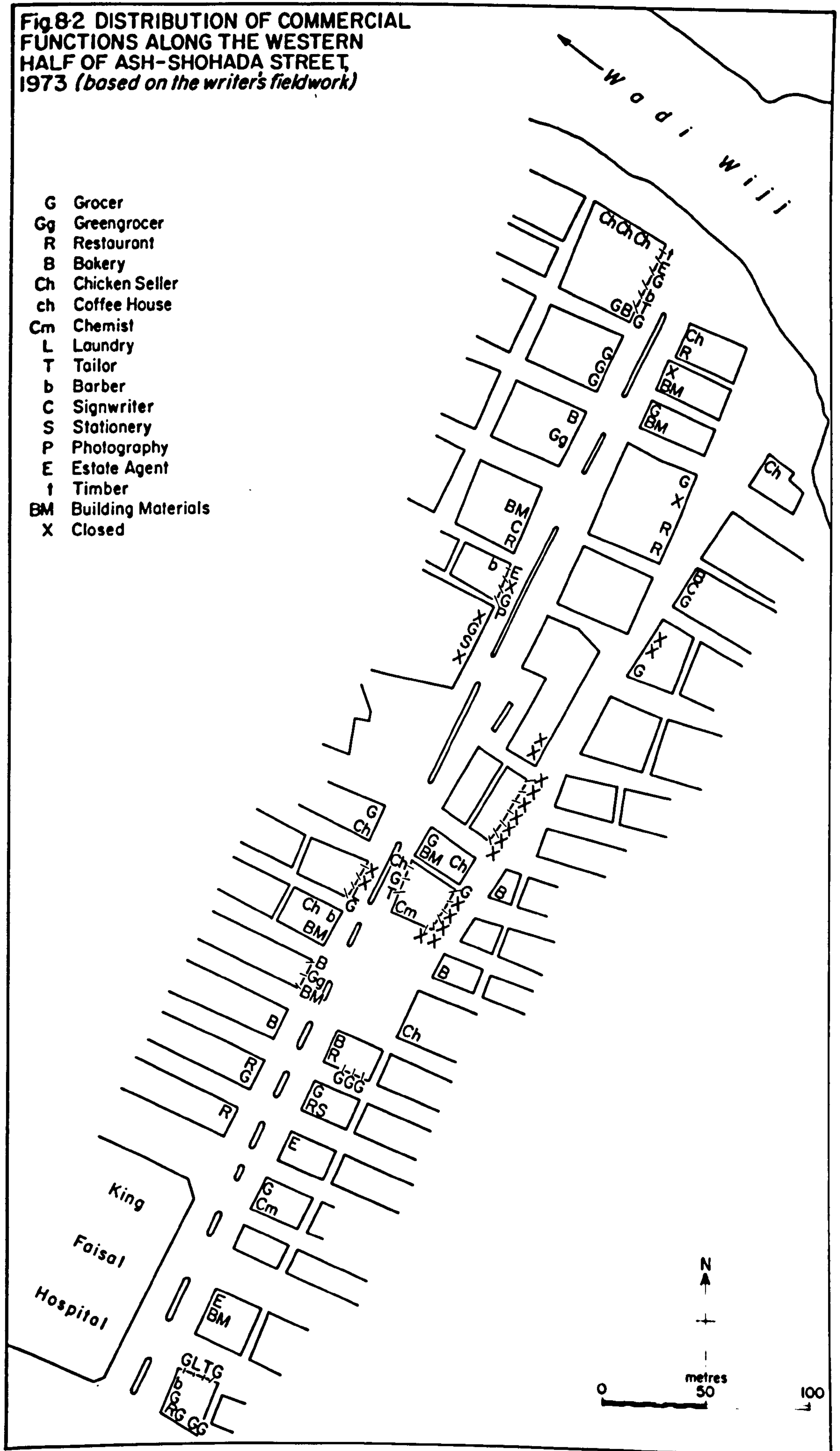
Uniformities of commercial functions witnessed in the suq of At-Taif city do not exist in the city's few commercial streets. This is so because these are not traditional, and their scale of service is limited virtually to the nearby dwellers. To be excluded are vehicle maintenance and repairs, metal and wood-working. Ash-Shohada Street is the best example of all (Fig 8.2) : in addition to being the southeastern entrance of the city, it passes through quarters of high residential density - which consist of permanent population with a medium to low standard of living, which becomes a source of manpower for its workshops and customers for its coffee houses.

Here, one shop bears almost no relation to its neighbour. As shown in Figure 8.2, the 110 shops contain 23 different commercial functions. The largest number is that of grocers (23) and followed, though at some distance, by restaurants (10), and coffee houses (8). Furthermore, the shop here has a larger size when compared with that located in the suq. This is related to land values, availability of space and quantity of goods stored. But it appears that the size of shops is getting smaller as time passes. The cause is that land values have gone up considerably (a square metre of land worth £5-10

* All shops have to close during prayer times and business must be brought to a halt. Royal Order No 21601, dated 8th December 1971

Fig 82 DISTRIBUTION OF COMMERCIAL FUNCTIONS ALONG THE WESTERN HALF OF ASH-SHOHADA STREET, 1973 (based on the writer's fieldwork)

- G Grocer
- Gg Greengrocer
- R Restaurant
- B Bakery
- Ch Chicken Seller
- ch Coffee House
- Cm Chemist
- L Laundry
- T Tailor
- b Barber
- C Signwriter
- S Stationery
- P Photography
- E Estate Agent
- t Timber
- BM Building Materials
- X Closed



in 1961 jumped to £30-50 in 1971, and further to £70-100 in 1973).

Hence it is becoming increasingly profitable to have as many shops as possible on the site. This will result in the migration of those not able to pay the rents, such as fruit sellers, and those who require a larger space, such as sellers of building materials (already one has left during the time of the investigation).

Commercial Functions beyond At-Taif City

The factors behind the absence of shops beyond At-Taif city were stated at the beginning of this Chapter. It is only at the settlements of Eshairah, As-Sail Al-Kabir and Al-Hawiyah that shops may be seen. Yet these are few in number, and poor in appearance and quality of goods kept. Shops are seen also in the summer resorts of Ash-Shafa and Al-Hada, but these are not permanent, i.e., they close down at the end of the visiting season. However, to show the characteristics and circumstances of the commercial activities outside At-Taif city, two selected examples are chosen. They are discussed below.

1. Al-Hawiyah

The settlement of Al-Hawiyah is situated 21 km north-east of At-Taif city on the Trans Arabia Highway. It is about 3 km away from the airport and air-base of Al-Hawiyah. Its population, according to the 1962-63 census, was 3,059 along with 161 semi-nomads who were attached to it. Here also many summer villas for the royal family are located. However, despite all this, there are only ten shops in the settlement of Al-Hawiyah. These shops (Fig 8.3), which have a very poor appearance, are no more than grocers. They sell, in particular, food

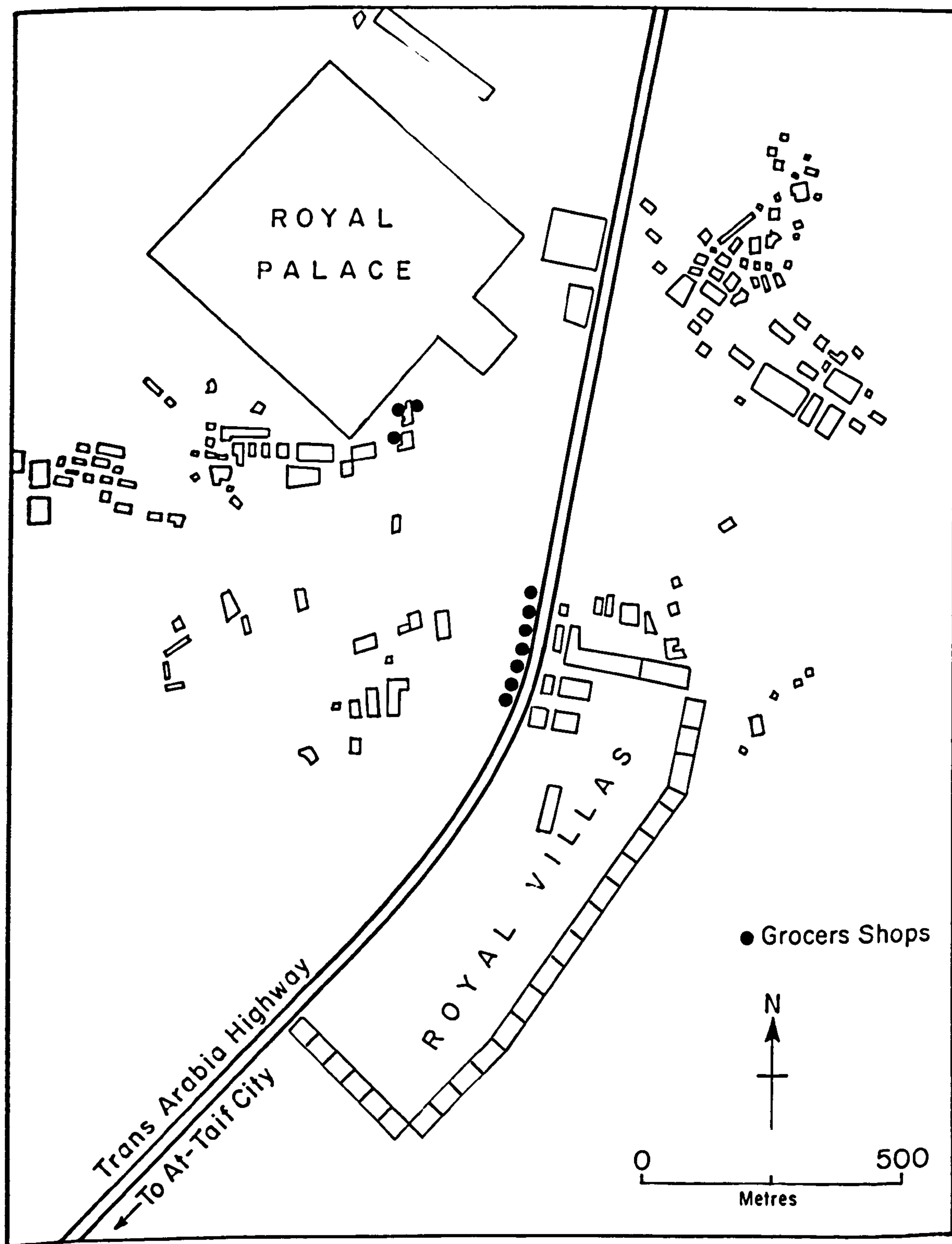


Fig 8-3. Distribution of commercial functions in Al-Hawiyah Settlement, 1973
(based on the writer's fieldwork)

(sugar, tea, grain) and household supplies (matches, ropes, nails, wicks, soap). Very little canned food, however, is to be seen, owing to its hearty dislike by rural and semi-nomadic populations. The dozen or so cans of mango juice kept in one of these shops must have been there for quite a long time. It was only bashfulness and respect that made the writer drink what was offered to him from this stock!

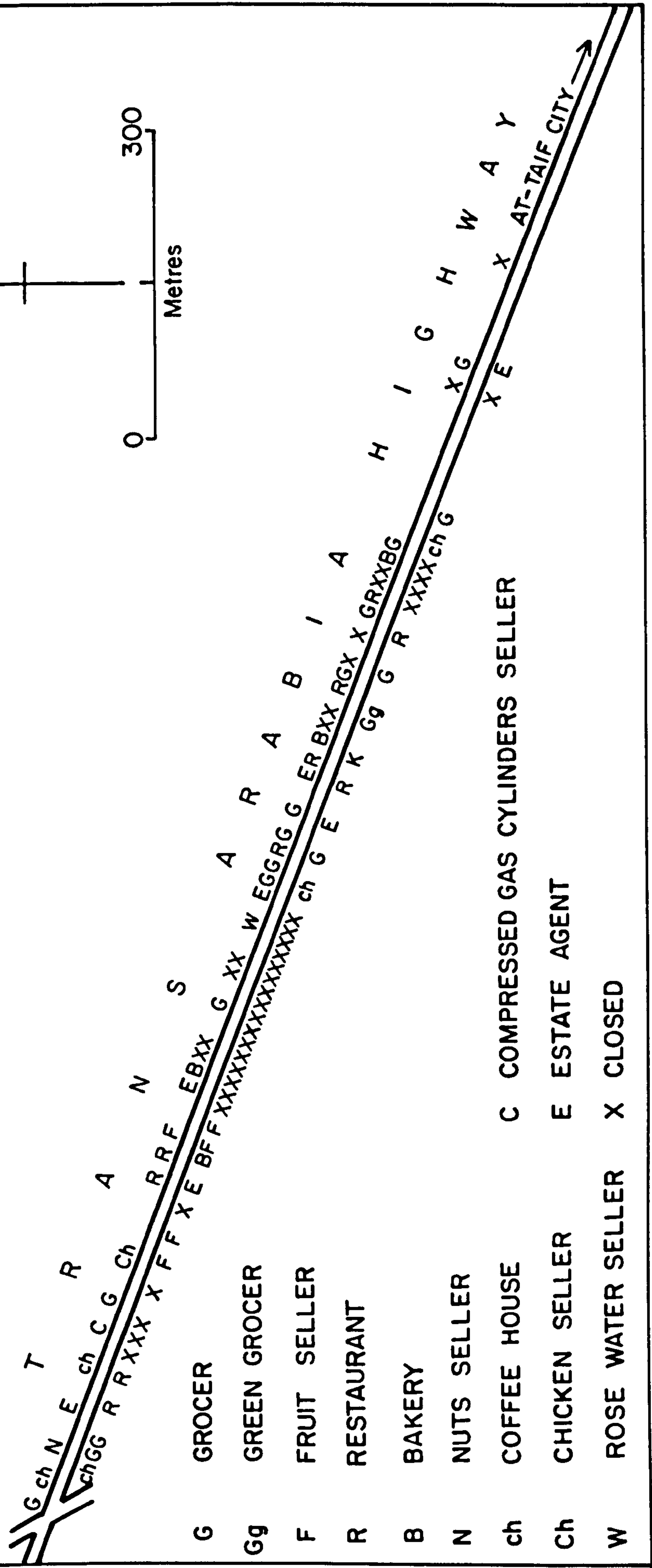
2. Al-Hada

The district of Al-Hada is situated at 2,000 m above sea level and over, some 20km north-west of At-Taif city. This advantage, coupled with the fact that the Trans Arabia Highway passes through it, have turned Al-Hada into a summer resort. Many shops (Fig 8.4) are seen here during the summer season to offer their services to holiday-makers. After that, none of them remains. The villagers, like those of Al-Hawiyah, do all their shopping in At-Taif city. Being cultivators and animal herders, they bring their produce into the city and spend the money they receive on the spot.

By examining Figure 8.4, it appears that the 55 shops in operation contain 14 different commercial functions; almost all are engaged in selling food and daily household supplies to holidaymakers. For example, grocers lead, totalling 14, followed by restaurants (10), fruit sellers (6), and bakers (6). The six estate agents offer their services to people interested in renting/buying property in the district, but the majority prefer to stay in tents. These are brought here after being used in the pilgrimage season in the holy places around nearby Makkah.

It appears also from Figure 8.4 that there are 38 vacant shops. This high total (as compared with the 55 operating shops) is related to

Fig.8.4 DISTRIBUTION OF COMMERCIAL FUNCTIONS IN THE SUMMER RESORT OF AL-HADA, 1973. (Based on the writer's fieldwork)



two factors. The first is that the writer's investigation was carried out at the end of September (1973), which is the end of the visiting season. Thus, it is perhaps possible to state that some of these shops were in operation during the peak of the season. The second factor is that most of the vacant shops are purpose-built shops (others are wooden or tent shops, or even stalls). This makes them more expensive to rent.

Another point arises from examination of Figure 8.4. This time it is the fact that all shops are located directly on both sides of the busy Trans Arabia Highway. The holidaymakers along with the permanent population have turned this road (which is supposed to be a highway for fast-moving traffic) into a busy street which could be found in any urban area. Hence it is the scene of many accidents, all caused by the complete freedom to cross the road at any point.

Industry

The Position of Industry in At-Taif Amirate

Unlike commerce, industrial development is still in its infancy in At-Taif Amirate, and it seems that this will continue for several years yet - an opinion based on the following factors:-

1. Little attention is given to industrial activities by the inhabitants of the Amirate. Their attitudes have been a result of (a) fear of getting into a situation which would become too difficult : a 'maze'; (b) guaranteed profits offered by other sectors, such as Government

service, housing and commerce; (c) more time and effort are required by industry; and, above all, (d) a traditional dislike of industrial activity.

The traditional dislike of industrial activity in Saudi Arabia seems nowadays to be limited to small-scale industries. Working in a big plant, for example in a cement factory, is more acceptable socially than working in a smaller scale establishment, for example in a vehicle repair shop. This is related not only to the appearance of the factory and its reputation (psychological factors) but also to the generally good and reliable pay (financial factor). But this change in attitudes has had little effect in the study area, because its industries are mainly small-scale.

2. Industrial activities in Saudi Arabia are concentrated in three regional industrial estates : Jeddah, Ad-Dammam and Ar-Riyadh, each of which is supposed to serve its entire region. Hence, there is little scope left for other 'estates' to flourish and compete; At-Taif's industrial 'estate' falls into this category. Absence of local raw materials, a low demand, and its nearness to 'industrial' Jeddah have all contributed to its poorly-developed industrial activities.

3. This is so, although the Government levy no tax at all on imported equipment and raw materials for industry. Furthermore, the Saudi Industrial Fund (established on 20th March 1974 with a capital of £50 million) "grants interest-free loans up to 25% of capital requirements for financing the fixed capital needs of new industrial establishments in the Kingdom as well as the existing industries for renovation, expansion and modernisation in conformity with the industrial policy of

the Government".³

Although this is the present position of industry in the study area, At-Taif was once regarded as being 'industrial', but this was long ago - a statement based on the writings of historians and travellers. The earliest account was given by Al-Hamadani (died 945 or 946 AD), who stated that At-Taif was a 'town of tanneries'.⁴ Yakut (1179-1229 AD) gave further details showing the scale of this industry: 'the smell of the water running from its tanneries on Wadi Wijj terrifies the birds!'⁵ Ibn Allan (1588-1647) mentioned that its population were all engaged in tanning.⁶ Since then, the scale of this industry has declined so that it is now undertaken only by a small fraction of the population. The main cause appears to be related to smaller returns associated with less demand, which in turn is also related to cheaper imported hides.

Current Industrial Activities

The present principal industrial activities in At-Taif Amirate are either (a) household industries such as tanning, weaving and spinning; (b) traditional crafts carried out in small workshops, such as silversmiths and coppersmiths; or (c) modern industries concerned with metalwork, furniture manufacture, etc. These are all small-scale industries.

(a) Household Industries

Household industries in the study area constitute primarily tanning, weaving and spinning. While tanning is the work of both men and women, weaving and spinning are completely undertaken by women. These women,

who are either rural dwellers or rural immigrants living in At-Taif city, carry these products to a certain square in the At-Taif suq where they are offered for sale. It is these activities (which mean an extra income for the household) which underline the difference between fully urban women and rural women.

Tanning, which uses local plants for soaking, produces skins (Plate 8.13) and leather, whilst wool removed from hides provides raw material (Plate 8.14) for weaving and spinning (see Plate 5.3). The product, on the whole, is a sort of rough reversible carpet, known locally as shamlah. Another household industry is making mats (Plate 8.15), besoms and brooms from palm leaves. These are also carried out by women of rural areas or rural origin. But these household industries as well as many others are declining because of rapid change in tastes and values and the continuous rise in standard of living.

(b) Traditional Crafts

These include silversmiths, goldsmiths, coppersmiths, blacksmiths, zincsmiths, dyers, leatherworkers and cobblers, potters, etc. Apart from most blacksmiths and all earthenware manufacturers, other craft products are made and sold in workshops. Handicrafts are of a high quality, as the skills have been handed down within a family for years, but unfortunately, low productivity, which is based on the small size of the market and labour involved, limit the scale of production. Integration with the outside world has affected these traditional crafts, for example, by introducing modern designs to ornaments made by silver- and goldsmiths. The effect has been felt more by goldsmiths, whose customers are mainly from the urban population, rather than by



Plate 8. 13
Skins in Barhat Bin Fitaïs, At-Taïf suq
Page 274



Plate 8. 14
"Wool removed from hides provides the raw material
for weaving and spinning (see Plate 5.3)" Barhat Bin
Fitaïs, At-Taïf suq
Page 274



Plate 8. 15
 Making mats from palm leaves. Barhat Bin
 Fitais, At-Taif suq
 Page 274



Plate 8. 16
 Products of a blacksmith. Barhat Bin Fitais,
 At-Taif suq
 Page 275

silversmiths, whose customers are mainly rural. The second example is related to leatherworkers and cobblers, as today these people make water-buckets from used tyre tubes, and shoes from used tyres (see Plate 4.1). The third example concerns blacksmiths (Plate 8.16); their raw material is derived largely from the large supplies of scrap-metal from disused vehicles. Furthermore, it appears that baked clay water-jars (Plate 8.17) are being replaced, though gradually, by zinc water containers (Plate 8.18). Although the latter are cheap and light to carry, they cannot keep water cool - a shortcoming that has been overcome by the growing use of refrigerators.

(c) Modern Industries

These include chiefly the manufacture of building materials, wood products, metalwork and the production of electricity. Apart from the latter, which is considered a service industry, the rest are of the manufacturing type which involves conversion of a raw material into fabricated articles. Their activities are directed towards meeting the requirements of the local market, but there are a few works which supply areas lying beyond the Amirate further south. Although the size of these industrial establishments is very small, this is compensated for by their numbers. For example, there were in At-Taif city in 1971, 71 woodwork and furniture manufacturing establishments, and 150 metalworking establishments⁷ - mainly for manufacturing gates, front doors, roller blinds and lattice for windows. The largest metalwork manufacturer in the Amirate started production in June 1966 with capital of £22,000. It is owned jointly by a Saudi Arabian businessman and an Iranian engineer who also runs the factory.

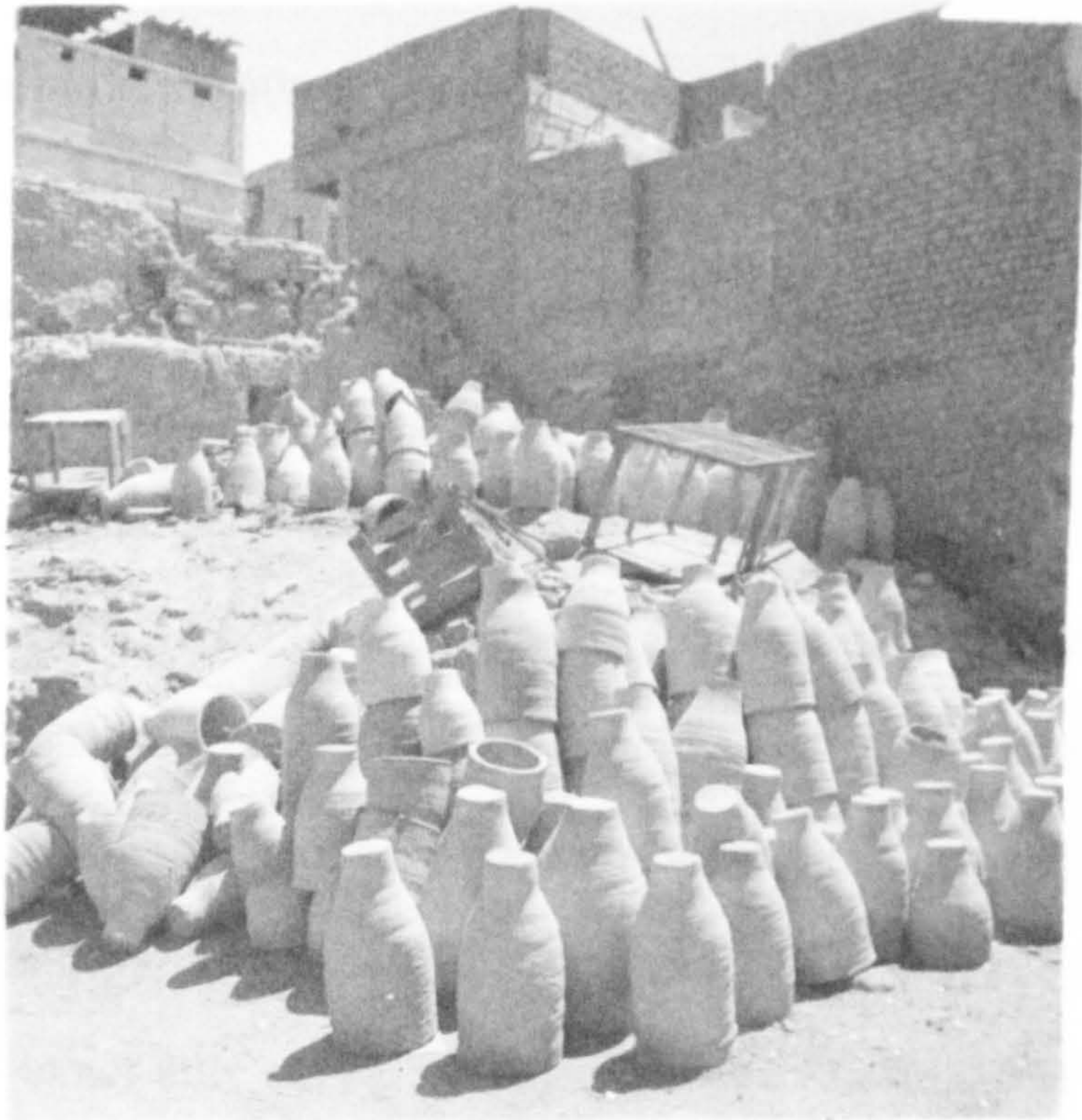


Plate 8. 17
Baked clay water-jars. Barhat Bin Mosmar,
At-Taif suq
Page 275

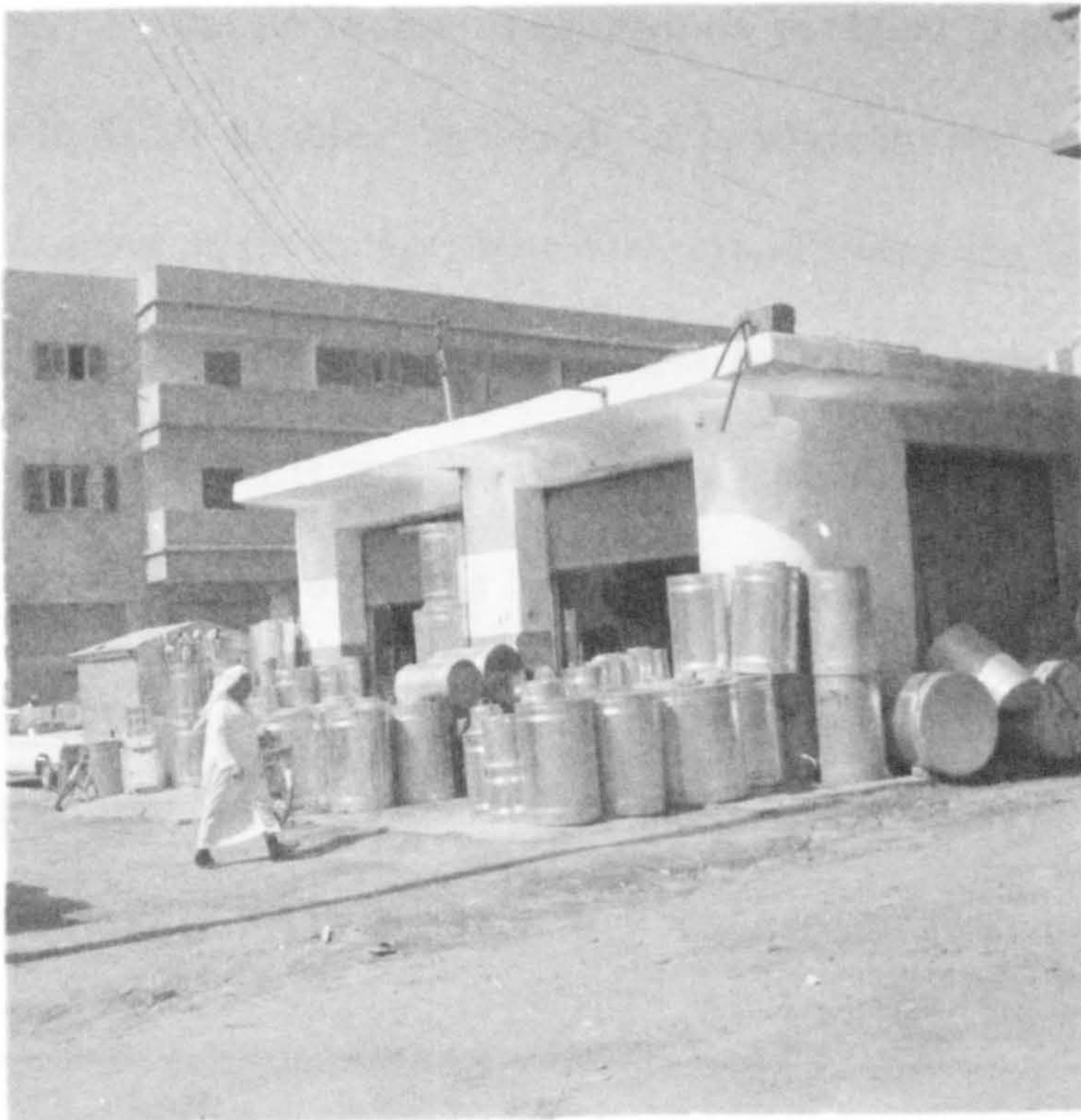


Plate 8. 18
Zinc water containers. As-Solaimaniyah
quarter
Page 275

While woodwork, furniture and metalwork may be considered of good quality, building materials manufactured in the Amirate are, in the main, of poor quality. This applies particularly to the manufacture of solid concrete bricks which are widely used in the Amirate. According to a specific study (made by the Industrial Studies and Development Centre in late 1971), it became apparent that none of the investigated establishments manufactures what can be called 'standard bricks'. Their products are of very poor strength due to the application of insufficient quantities of cement, improper aggregates are used and the material is not fully cured. "The operators admitted that the cement content in their concrete mixes was approximately 70 to 80kg per m³ of concrete - about one-fourth to one-third of the cement used in ordinary concrete. Such a mixture resembles stabilised soil rather than concrete. The reason given was that it would be impossible to compete otherwise."⁸ But no restrictions have as yet been imposed on such activities in Saudi Arabia. However, it is scarcity and dearth of cement* (among other things) that have closed down the largest block and brick factory in the Amirate in its first operative year - 1971. The German-built factory (built at a stated cost of £18,300) is capable of manufacturing six million blocks and bricks annually.

As far as electricity production is concerned, supply covers only At-Taif city and its immediate surroundings, thus leaving most of the Amirate without electricity. There are a very few private generators.

* In addition to 674,950 and 703,371 tons of cement manufactured in Saudi Arabia during 1970 and 1971, an additional 463,801 (1970) and 549,876 (1971) tons were imported - according to the Central Department of Statistics

However, a project to expand the area supplied by electricity is under discussion at present. Its aim is to extend supplies to the settlement of Al-Hawiyah (north-east of At-Taif city) and the district of Al-Hada (north-west of At-Taif city) with a permanent supply.

Electricity production, which is in the hands of a joint stock company (established in October 1947), is supplied from large generators which run on crude oil and are capable of producing 20,000 kwh - far above the requirements of the 20,578 subscribers (1974). Of this, only a small fraction of the electricity production is consumed by industry. There are no up-to-date data as regards this matter, but electricity sold during 1966 and 1967 to industry in At-Taif city amounted to 2.8% and 2.5% respectively, as compared with 97.2% and 97.5% which was consumed by householders - according to the Central Department of Statistics. Although such a tiny fraction is related to the small size of industry, it is also related to the fact that the majority of industrial establishments have registered their industrial electricity consumption as household consumption : the difference between the two tariffs is a relevant factor here.

Location of Industrial Establishments

All industrial establishments in the study area are located in At-Taif city with none in the rural area; even those industries which use raw materials located in the rural area. Operators have found it more profitable to locate their premises in the city. This is partly because of the negative attitude of rural people towards industry, but mainly because of the multiple attractions offered by the city for

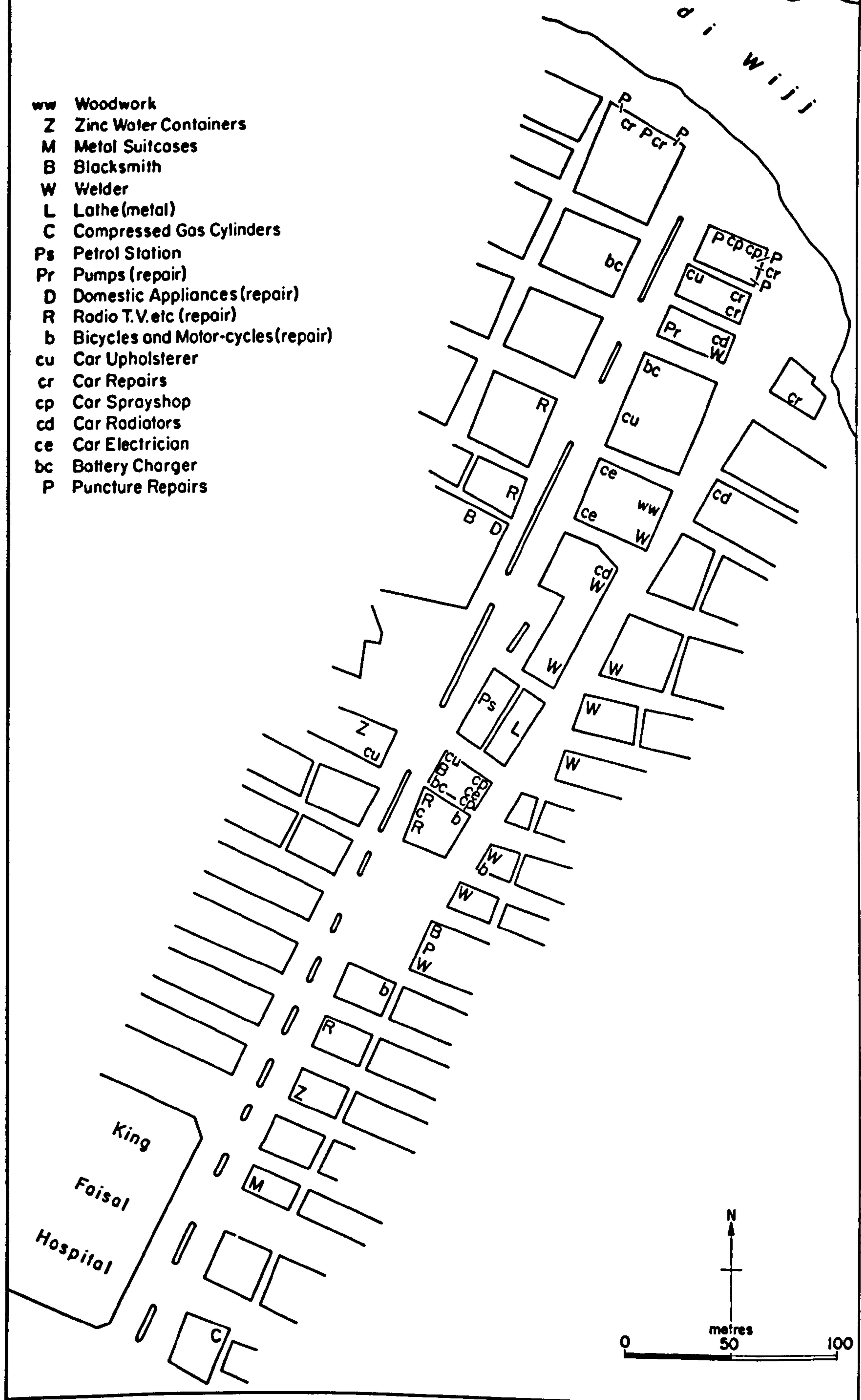
Industrial activities. These include availability of labour supply, both local and foreign, skilled and unskilled, and the opportunity to exploit a sizeable marketing area. In addition, the small size of factories and the nature of the industries present (absence of chemical industries, for example) made the city a favourable location, and there was no need (under present conditions) to build an industrial estate away from residential areas.

But, to be more precise, most industrial establishments are located on one site in At-Taif city, although there has been no legislation to direct establishments to this one place. It appears that this is related to the pattern of urban expansion and external economic forces which result in industrial groupings where industries of a similar nature are attracted to each other. Also, this clustering is related to a psychological phenomenon already witnessed in the alleys within the suq of At-Taif city, many of which specialise in selling the same article. Clustering thus takes place along the trunk road that passes through the quarters of Old and New Ash-Shohada and acts as the city's south-eastern entrance (Fig 8.5). This area is easily accessible, accommodation and rents are cheap, and its population provides a constant supply of labour. Hence, none of At-Taif's high officials and wealthy people live here, and the same applies also to wealthy holidaymakers.

Labour

One would not expect there to be a large industrial labour force in the study area since industry is of such minor significance. In

Fig 8-5. DISTRIBUTION OF INDUSTRIAL ESTABLISHMENTS ALONG THE WESTERN HALF OF ASH-SHOHADA STREET, 1973 (based on the writer's fieldwork)



fact, At-Taif city, which contains all the 821 industrial establishments in the study area, has a labour force of only 1,724 persons (according to the 1971 Census of Establishments conducted by the Central Department of Statistics) : this means an average work force per establishment of just over two persons. According to this census, there are 383 industrial establishments employing one person only, compared with 385 industrial establishments employing between two and four persons. The remaining 53 industrial establishments have work forces of between five and 49 persons. These figures could suggest that industries may have an equal proportion of owners (and unpaid relatives, etc), and of paid employees. But, according to the census data, there are 531 (30.8%) unpaid employees and 1,193 (69.2%) paid employees. Hence these data show that the proportions are in fact unequal. The discrepancies can be resolved in the following way. From personal observation and investigation, it appears that many of the owners of Saudi industrial establishments are not themselves closely involved in running, or working in, their premises : most of the work is carried out by paid employees. Moreover, their sons may not participate in the work, either because they are attending school or because they think it is beneath their dignity.

Most industrial establishments are owned by Saudis and the paid employees are mostly non-Saudis. Naturally, non-Saudi employees did not come to Saudi Arabia with their workshops or with capital, and in most cases they even lacked any skills. Hence, many started business from the very beginning. Through continuous practice, strong will and simple-minded customers, these people have acquired skills

and become more prosperous. For those who have not been able to obtain Saudi citizenship, the best way of avoiding regulations regarding Investment of Foreign Capital has been to work (illegally) under the cover of a Saudi name (see p 160). The favoured legal method is to run the business and provide the labour while a Saudi Arab supplies the capital.

There are no recent data on the educational qualifications of industrial establishments' employees, but figures collected by the Census of Employees in public-owned establishments of 1968, conducted by the Ministry of Labour and Social Affairs, gives an impression of the situation at that time. 57.8% Saudi employees, and 81.2% non-Saudis, were classified as illiterate; 1.2% of the Saudi labour force have completed intermediate level but not secondary, higher or vocational education. 0.3% of non-Saudi employees have completed intermediate level and 0.9% secondary level : none has higher level education.

As far as unemployment is concerned, no data are available, because the financial benefits of unemployment registration are trivial. There is a general dislike of manual work, because of its dirtiness, the fixed hours of work and the demand for steady and repetitive activity. Most, if not all, Saudi employees take up such posts only to earn money, but rarely as a career. They change jobs at the first opportunity of 'respectable' work, such as Government service or the retail trade. The absence of any long-term commitment to their jobs has meant that few Saudi workers have learned industrial skills. The Government, however, is trying to alter the situation by

establishing vocational education centres, and a guaranteed future is offered to its leavers, but other means of earning remain more attractive. An example of Government encouragement is the monetary compensation which is offered, for example, for workers accidentally killed at work. This is £2,700 for a first-class worker, £1,800 for a second-class worker, and £1,200 for a junior worker. These have to be paid by the employer, but difficulties have arisen because the 'blood money' (Ad-deyah) of an individual is fixed at £2,400. Relatives of the dead man take the monetary compensation (which is usually less than the blood money) from the employer and then start a law-court process asking for the blood money. Even though such a procedure is long and may not succeed, the prospect of more money has meant that many appellants have not been deterred from appeal.

REFERENCES

1. Burckhardt, J L, Travels in Arabia, vol 1, London, 1829, p 158
2. Pasha, A S, Miraat Al-Haramain, vol 3, Istanbul, 1886, p 197
(Ottoman Turkish)
3. Saudi Arabian Monetary Agency, Statistical Summary, 1st Issue, 1974-1975, Jeddah, 1975, p 17
4. Al-Hamadani, A, Sifat Jazirat Al-Arab, Cairo, 1953, p 120
(Arabic)
5. Yakut, Mojam Al-Buldan, vol 4, Beirut, 1957, p 9 (Arabic)
6. Ibn Allan, M, Taif At-Taif fi Fadhl At-Taif, about 1638, p 33,
(Manuscript, Arabic)
7. Central Department of Statistics, Ministry of Finance and National Economy, Census of Establishments in the City of At-Taif, June-August 1971 (Arabic)
8. Industrial Studies and Development Centre, The Quality of Solid Concrete Bricks, Ar-Riyadh, 1972, p 2

PART FOUR

A CASE STUDY

CHAPTER 9

MINORITY GROUPS IN AT-TAIF CITY

It was shown in Chapter 3 that the population of At-Taif city is of a heterogeneous nature. In 1962-63 the population was 80% Saudi and 20% non-Saudi; by 1971 the population of non-Saudis had increased to 25%.¹ But only 16.2% of the total of At-Taif city householders in 1971 had been born in the city.* Chapters 3 and 4 of this thesis are devoted to the general characteristics of the city's native and immigrant populations; the present chapter will now discuss minority groups, both Saudis and non-Saudis, who have migrated to At-Taif city. People of homogeneous origin, culture and character who live closely together in 'enclaves' within city limits qualify as minority groups.

Although the presence of minority groups in At-Taif city is an important characteristic of the city, there have been no measurements of their scale, nor even elementary studies of the causes and consequences of their presence. A second point of significance is that they live in identifiable 'clusters', and are not scattered among general townspeople. It is therefore the aim of this chapter to give an account of these minority groups and to assess their importance within the city. In particular, the following main points will be discussed : who are these people? What are the reasons for their presence? Where are they? What processes underlie their distribution? And comments on a strategy for minority groups in At-Taif city.

* See Table 3.2, page 123, Chapter 3

In the absence of any published data, the writer undertook field-work, based on two types of evidence or investigation 'leads'. The first 'lead' was the names of areas in At-Taif city which may in some way be related to names of areas outside, or to names of tribes, clans, or any group of people. The second 'lead' concerns the records of the Ains and Wells Department of the distribution of water deliveries in the city by means of water-trucks. * The assumption was that there may be a relationship between the name of an area and the people living there.

The writer carried out the investigation in 12 areas of At-Taif city using questionnaires** and interviews. As shown in Figure 9.1, areas numbered 1 to 5 are taken from the distribution list of Ains and Wells Department, areas 6 to 8, 10 and 11 are identified from their names, while areas 9 and 12 were selected on both criteria. (There are three other areas in At-Taif city not covered in this investigation, and which are populated by Russian and Chinese Turkestanis,*** and Americans : the writer was requested to avoid these areas because they are 'politically sensitive'.)

After an initial approximate demarcation of the limits of these areas or sub-quarters (which bear no relation to the boundaries of official city quarters)****10% samples were collected along an axis leading to the city centre; in all, 300 questionnaires were collected (see

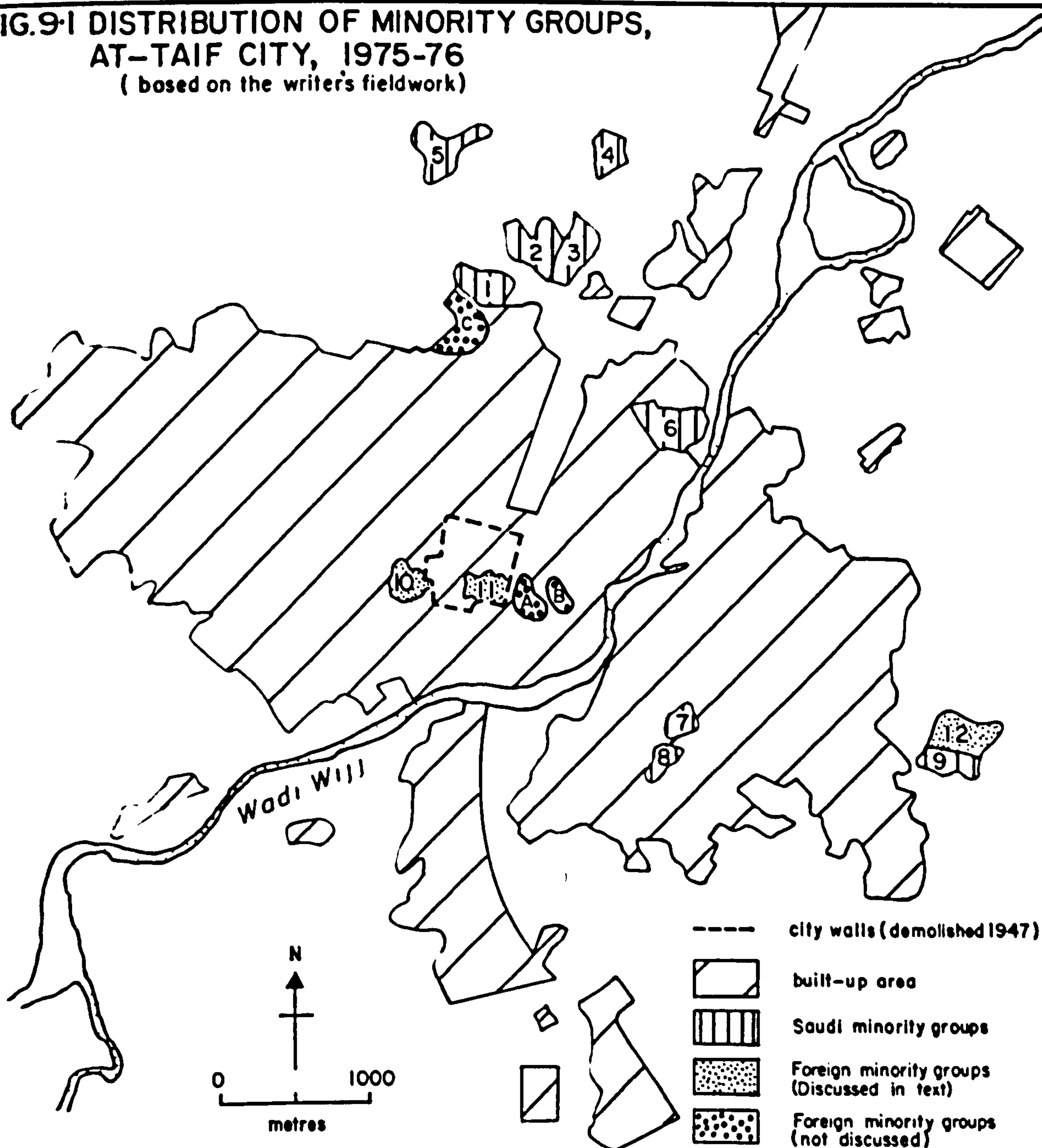
* See p 110 and Plate 2.13, Chapter 2.

** See Appendix

*** See pp 150-154, Chapter 4.

**** See pp 75-76 and Figure 2.5, Chapter 2.

**FIG.9-1 DISTRIBUTION OF MINORITY GROUPS,
AT-TAIF CITY, 1975-76**
(based on the writer's fieldwork)



1 SHARAQRAQ

2 MANFOHAH

3 BIN SOWAILEM

4 ATH-THAQAFAH

A RUSSIAN -
TURKESTANIS

5 AL-MADFAEIYAH

6 AL-BAYASHAH

7 AZ-ZOWAD

8 ATH-THIBATAH

B CHINESE -
TURKESTANIS

9 AL-HAQAWIYAH

10 AL-HADHARIM

11 AL-YOMANA

12 AT-TAKARNAH

C AMERICANS

below). This method was chosen because it was more suitable and convenient than other data collection methods. This was established by a balance between a satisfactory sample size with the time at the writer's disposal, and degree of response and hospitality of questioned people. Limits of 'minority' areas were taken to occur when three successive questionnaires produced negative results; that is, the households concerned did not belong to the minority group in question. It is the high degree of segregation that made it possible to draw satisfactory limits of areas on the 'stopping rule' of three consecutive negative responses.

Finally, if this questionnaire had not been carried out in an official capacity, a 100% response would have been impossible. The company during the survey of each area's nakeeb (its representative in Police, Court and Amirate's offices) helped considerably to give confidence to these people, thus bringing them into discussion. It was for the sake of accuracy that personal contact with heads of households was established. As many as 164 questionnaires were dictated to the writer, after having been initially returned incomplete. "Who could answer such difficult questions?" was a common remark, but discussions showed that ignorance, illiteracy, and lack of care and attention accounted for most incomplete or blank questionnaires, rather than unwillingness to respond.

Origin of Minority Groups

Nine of the 12 sampled areas or sub-quarters are inhabited by Saudis, the remaining three by non-Saudis (Fig 9.1). They may all be

called immigrant areas, for only 33 of the 300 distributed questionnaires showed that they represented people who did not belong to the minority group in question. Furthermore, only eight of these 33 documents showed that they represented 'true' people of At-Taif city, with a history of several generations who had lived in the city before them.

As shown in Table 9.1, a fraction (1.1%) of minority group householders were born in At-Taif city itself; most of the rest were born either in At-Taif Amirate (23.2%) or in Al-Hijaz (32.6%) to which the Amirate belongs. This means that over half (55.8%) of minority group householders were born not too far from the city - a percentage which illustrates the central importance of the city within the Amirate on a small scale, and within Al-Hijaz on a wider scale. This relationship is further illustrated by the low percentage (16.5%) of those born in the rest of Saudi Arabia. A major reason for the high figure of minority group householders born in At-Taif Amirate and Al-Hijaz is that of geographical proximity, aided by a common belief which exists that the nearer you are to your place of origin, the greater legality to dwell in the present place.

The percentage of minority group householders born outside Saudi Arabia is high : 26.6%. Areas 10, 11 and 12 are thickly inhabited by immigrants from Southern Yemen (100.0%), from the Yemen (96.1%), and from Nigeria (70.0%) and Mali (30.0%) respectively.* These people are either attracted by religious or secular interests. Several circumstances are involved in their presence, distribution,

* See pp 154-158, Chapter 4.

TABLE 9.1

Distribution of Minority Group Householders by Place of Birth, At-Talf City, December 1975 to February 1976

Area	Settling began in	Place of Birth									Total	
		At-Talf City	At-Talf Amirate	Al-Hijaz	Asir	Najd	Yemen	Southern Yemen	Nigeria	Mali		Others
1. Sharaqraq	1958		9	20		5						34
2. Manfohah	1960		7	11								18
3. Bin Sowaillem	1965		8	13								21
4. Ath-Thaqafah	1967		7	5	4							16
5. Al-Madfaeliyah	1964		3	13	8	5						29
6. Al-Bayashah	1950	1	1	23		1						26
7. Az-Zowad	1960		11	1	1							13
8. Ath-Thibatah	1960		14	1	1							16
9. Al-Haqawiyah	1968				19							19
10. Al-Hadharim	1960	1	1					17			1	20
11. Al-Yomana	1970	1	1				22				1	25
12. At-Takarnah	1968								21	9		30
Total		3	62	87	33	11	22	17	21	9	2	267
Percentage		1.1	23.2	32.6	12.4	4.1	8.2	6.4	7.9	3.4	0.7	100.0

Source : Fieldwork, December 1975 to February 1976.

and the processes which underlie their distribution; all to be discussed in the appropriate sections.

Table 9.1 shows a strong relationship between area and a particular group. For example, areas numbered 7 and 8, which carry the names of sub-tribes whose territory is located within At-Talf Amirate, are inhabited largely by migrants from these sub-tribes, 92.8% and 94.1% respectively. Their neighbours may be regarded as being related to them, being from Al-Hijaz and Asir, not - for example - from Najd or outside Saudi Arabia. Another example is Al-Bayashah (area 6) with a name derived from Bishah town and region, south-east of At-Talf Amirate : 100% of its inhabitants came from the town and region of that name. This high level of concentration applies also to foreign minority groups as described previously. Areas numbered 1 to 5, however, show a mixture of groups, prompting further investigations which duly revealed that there is a grouping within each area, a condition which will be mentioned later. Figure 9.2 is a map summary of the direction and magnitude of migration streams.

Table 9.2 shows whether householders of minority groups were originally urban, rural dwellers, nomads, or semi-nomads; as well as the period during which migration to At-Talf city occurred. The classification is by area of origin (see Figure 9.3). A summary of important points may be made.

Overall, the period 1961-65 witnessed a peak (31.1%) in minority group householders migrating to At-Talf city. No period contributed less than 19.0% of the total increase, showing that the feeding of these 12 areas has been a continuous process.

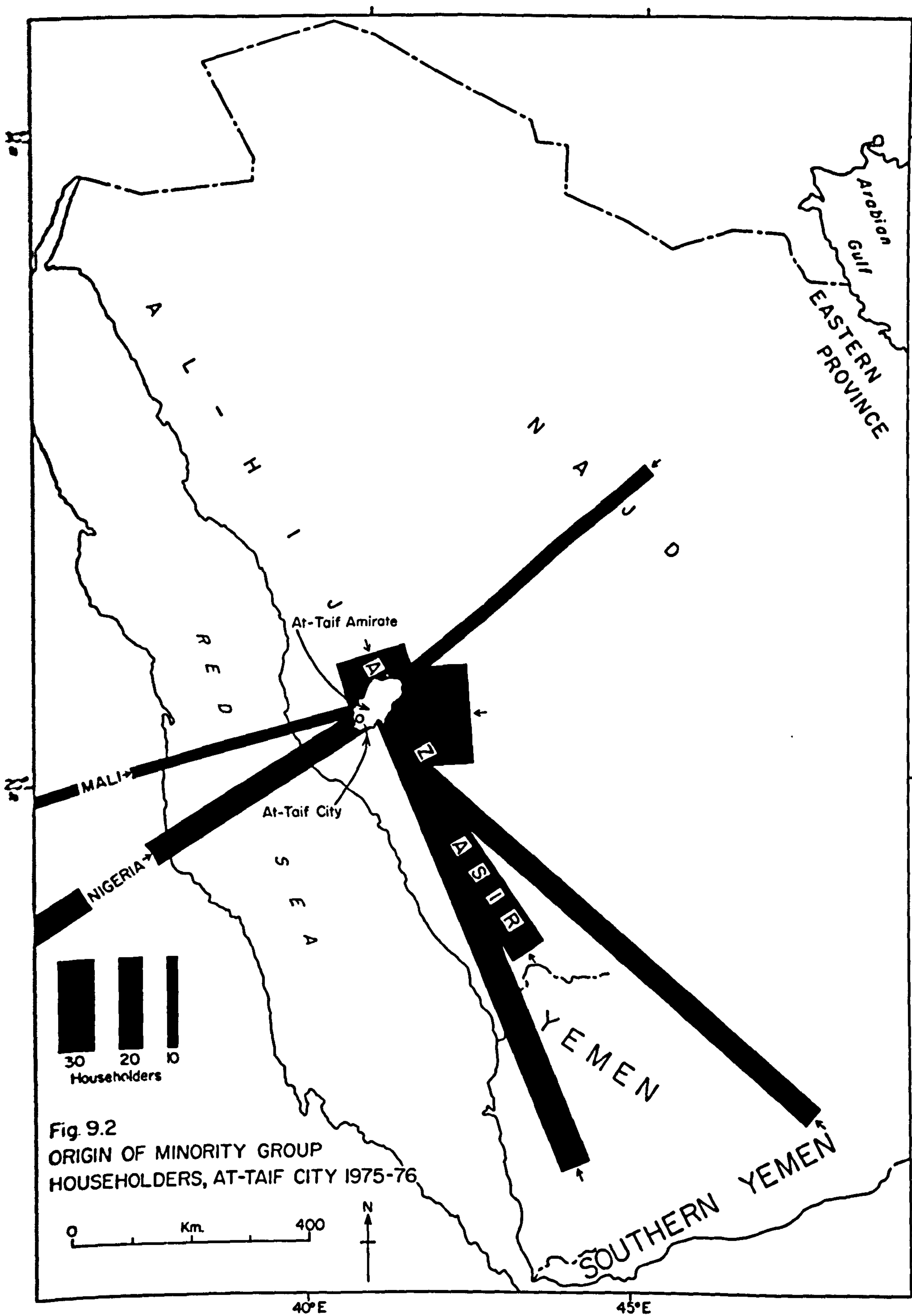


Fig 9.2
ORIGIN OF MINORITY GROUP
HOUSEHOLDERS, AT-TAIF CITY 1975-76

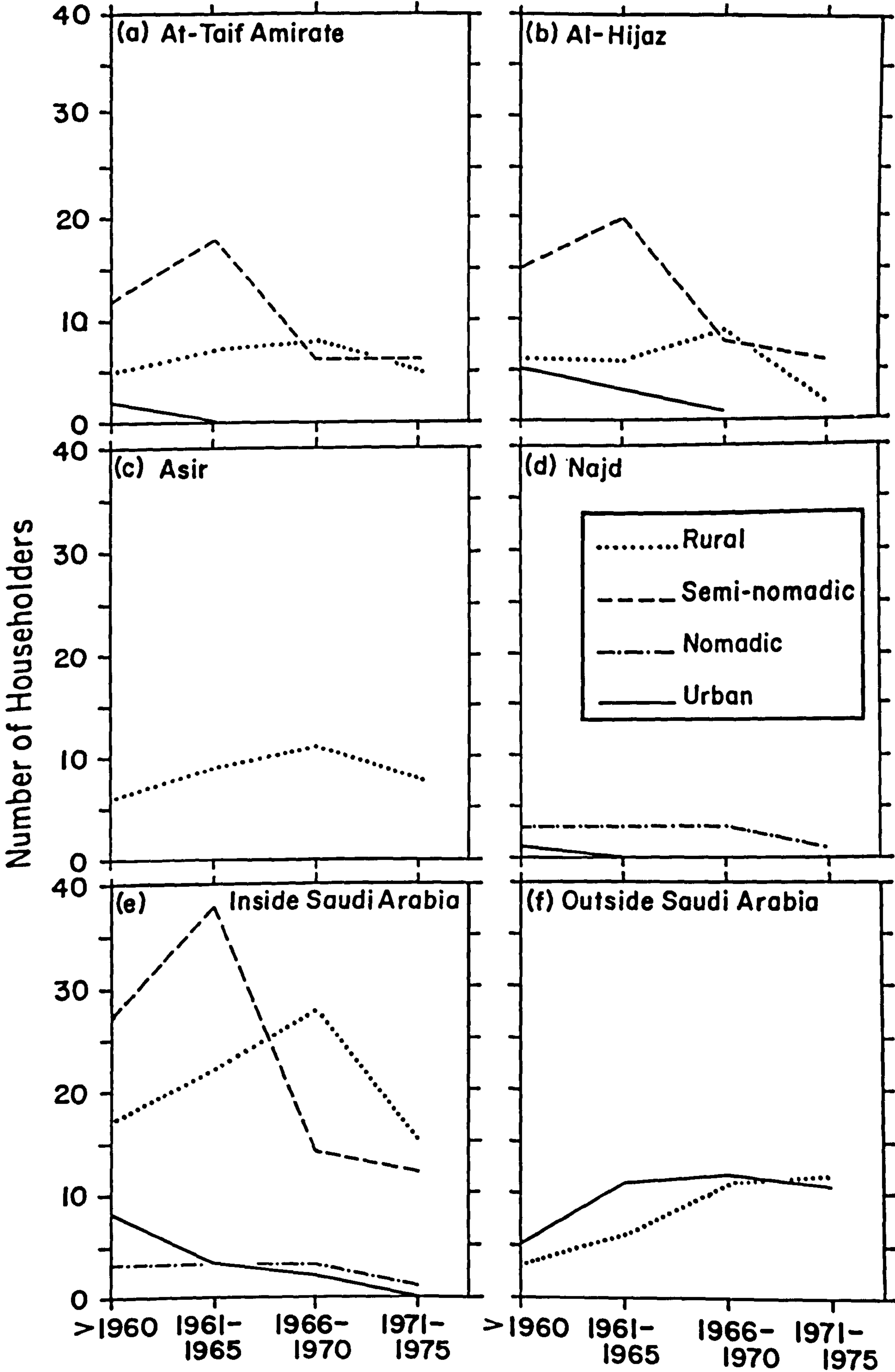
TABLE 9.2

Distribution of Minority Group Householders by Type of Origin, Area of Origin, and Period of Migration, At-Talf City, c1960-1975

Type of Origin	Area of Origin	Period of Migration				
		1960 or Before	1961-1965	1966-1970	1971-1975	All Periods
urban area } rural area } semi-nomadic }	At-Talf Amirate	No % 2 100.0	No % 7 28.0	No % 8 32.0	No % 5 20.0	No % 2 100.0
		5 20.0				
		12 28.6				
urban area } rural area } semi-nomadic }	Al-Hijaz	5 50.0	No % 3 30.0	No % 2 20.0		10 100.0
		6 26.1				
		15 30.6				
urban area } rural area } semi-nomadic }	Asir	6 17.6	No % 9 26.5	No % 11 32.4	No % 8 23.5	34 100.0
urban area } rural area } semi-nomadic } nomadic area }	Najd	1 100.0				1 100.0
urban area } rural area } semi-nomadic }	Outside Saudi Arabia	3 30.0	No % 3 30.0	No % 3 30.0	No % 1 10.0	10 100.0
		5 12.8				
		3 9.4				
All Types	All Origins	63 23.6	83 31.1	70 26.2	51 19.1	267 100.0

Source : Fieldwork, December 1975 to February 1976

Fig 9.3 MIGRATION OF MINORITY GROUP HOUSEHOLDERS TO AT-TAIF CITY FROM SIX SOURCE AREAS >1960-1975



When type and area of origin are considered, the pattern is more varied. For example, the period 1966-70 witnessed the highest arrival percentage from rural parts of At-Talf Amirate, Al-Hijaz, and Asir. The major push factor here was a serious drought. On the other hand, the percentage of semi-nomadic people increased during the 1961-65 period, but not 1966-70. Thus, although there was clearly some human movement due to drought, most migrants were in fact personnel of the Ministry of Defence and Aviation transferred during the Yemen War.

The proportion of householders of urban origin is not only noticeably lower compared with other types but has also declined over time. Alternative, more attractive urban areas (notably nearby Jeddah and more distant Ar-Riyadh) is the explanation.

Householders of nomadic origin have come wholly from outside At-Talf Amirate, Al-Hijaz, and Asir; they are all from Najd and are service men of the National Guard stationed in the city.

Householders of minority groups coming from outside Saudi Arabia, both of urban and rural origins, have increased since the late 1960's. This is closely related to the expanding opportunities accompanying economic improvement which has attracted, in particular, inhabitants of areas 10 and 11, as will be shown later. As described on pages 72-74, the city (as well as the country) has witnessed a rapid economic growth since the late 1960's.

Differences between the sum of native and foreign minority group householders are illustrated in Figure 9.3e and f. No cases of foreign semi-nomads or nomads were observed. Figures for foreign urban householders are higher than natives, not only in percentage terms but

also absolutely. Foreigners have also shown a fairly constant arrival pattern, while the numbers of recent Saudi migrants are decreasing. Extensive programmes of modernisation and development carried out in Asir are partly responsible for the decreasing flow of Saudi migrants.

It was a noticeable feature that settling usually began with an initial group of householders arriving, their numbers thereafter increasing as additional members joined them. Starting dates of settling these 12 areas are given in Table 9.1.* As far as the marital status of minority group householders is concerned, it would appear that the majority of these people are married - 85.3% in all (Table 9.3). There were therefore only small percentages of unmarried (7.5%), divorced (6.1%) and widowed (1.1%) people. These are generalised figures, they vary slightly from one area to another. The exceptions are areas 10 and 11, inhabited by Southern Yemenis and Yemenis respectively. Area 10 has as many as 20% of its householders who were reported unmarried, whilst area 11 had the much higher percentage of 64. As will be discussed later, it was found that both Southern Yemenis and Yemenis had economic motives for coming to At-Taif : arriving single was the best way to accomplish economic advance in the shortest possible time.

The majority of marrieds reported recent dates of marriage : 36.0%

* It was a frequent occurrence during the time of collecting questionnaire sheets and checking or writing answers, that the writer's attention was drawn by each area's nakeeb to the fact that earlier dates of migration to At-Taif city were given or written instead of the correct dates. Earlier dates carry real advantages that (a) for natives, the longer the residence, the better chance of owning land; (b) and for foreigners, a better chance of becoming qualified for certain Government help, and even for obtaining Saudi nationality.

TABLE 9.3

Distribution of Minority Group Householders by Marital Status, At-Talf City, December 1975 to February 1976

Area	Unmarried	Married					Divorced	Widowed	Total
		less than 5 years	5-9 years	10-15 years	16-20 years	more than 20 years			
1. Sharaqraq	No %	No %	No %	No %	No %	No %	No %	No %	34
2. Manfohah		16 47.1	11 32.3	4 11.8	3 8.8		1 5.6		18
3. Bin Sowallem		8 44.4	8 44.4	1 5.6			2 9.5		21
4. Ath-Thaqafah		8 38.1	6 28.6	4 19.0	1 4.8		3 18.7		16
5. Al-Madfaeliyah		6 37.5	4 25.0	3 18.7			1 3.5		29
6. Al-Bayashah		13 44.8	13 44.8	2 6.9			4 15.4		26
7. Az-Zowad		4 15.4	8 30.8	6 23.1	3 11.5	1 3.8	1 7.7		13
8. Ath-Thibatah		3 23.1	6 46.1	2 15.4	1 7.7				16
9. Al-Haqawiyah		3 18.7	8 50.0	3 18.7	2 12.5		1 5.3	2 10.5	19
10. Al-Hadharim	4 20.0	9 47.4	5 26.3	2 10.5					20
11. Al-Yomana	16 64.0	1 5.0	8 40.0	6 30.0	1 5.0		1 4.0		25
12. At-Takarnah		3 12.0	1 4.0	4 16.0			2 6.7	1 3.3	30
Total	20 7.5	8 26.7	9 30.0	5 16.7	4 13.3	1 3.3	16 6.1	3 1.1	267
		82 30.7	87 32.6	42 15.7	15 5.6	2 0.7			

Source : Fieldwork, December 1975 to February 1976

less than five years ago, and 38.1% five to nine years ago. This could be related to the fact that the householders themselves are young, and that early marriages are the norm. As shown in Table 9.4, the majority of householders are 20-29 years old (52.4%). Most of the remainder are 30-39 years old (40.4%). These average figures do not differ appreciably from one area to another.

Reasons for the Presence of Minority Groups in At-Talf City

The decision of people to move rather than to stay is influenced by the characteristics of the origin and destination areas, by intervening obstacles, and personal factors.² These factors, which may be economic, social and cultural, or psychological in nature, vary depending on whether places attract, repel or are neutral in their appeal. Accordingly, the general decision to move may be influenced by factors quite different from those influencing the decision to move to a particular destination. The latter decision was studied here; that is to say, the reason for the presence of minority group householders in At-Talf City. Data are cross-classified by these people's area of origin. Percentages were first calculated for the three major kinds of reason (economic, social and cultural, and psychological), and then for more specific reasons within each category (Table 9.5 a and b). Analyses will be carried out first for Saudi migrants, since these form nearly three-quarters of the total, before turning to foreign immigrants.

(1) The Saudi Groups

Economic reasons are the most important single category (48.5%)

TABLE 9.4

Distribution of Minority Group Householders by Age, At-Talf City, December 1975 to February 1976

Area	Less than 20 years		20-29 years		30-39 years		40-49 years		50-59 years		50 years and over		Total
	No	%	No	%	No	%	No	%	No	%	No	%	
1. Sharaqraq			19	55.9	15	44.1							34
2. Manfohah			10	55.6	8	44.4							18
3. Bin Sowaillem			15	71.4	6	28.6							21
4. Ath-Thaqafah			9	56.2	7	43.8							16
5. Al-Madfaelyah			19	65.5	10	34.5							29
6. Al-Bayashah			6	23.1	14	53.8	6	23.1					26
7. Az-Zowad			5	38.5	6	46.1	2	15.4					13
8. Ath-Thibatah			4	25.0	10	62.5	2	12.5					16
9. Al-Haqawiyah			7	36.8	11	57.9	1	5.3					19
10. Al-Hadharim			12	60.0	7	35.0	1	5.0					20
11. Al-Yomana			20	80.0	5	20.0							25
12. At-Takarnah	2	6.7	14	46.7	9	30.0	5	16.6					30
Total	2	0.8	140	52.4	108	40.4	17	6.4					267

Source : Fieldwork, December 1975 to February 1976

TABLE 9.5

Distribution of Minority Group Householders by Motivesfor Presence and Area of Origin, At-Taif City, December 1975 to February 1976(a) Broad Classification of Motives

Area of Origin		Economic		Social and Cultural		Psychological		All Reasons	
		No	%	No	%	No	%	No	%
Native	At-Taif Amirate	35	55.6	15	23.8	13	20.6	63	100.0
	Al-Hijaz	43	48.9	22	25.0	23	26.1	88	100.0
	Asir	8	25.8	5	16.1	18	58.1	31	100.0
	Najd	7	70.0	3	30.0			10	100.0
	Saudi Arab	93	48.5	45	23.4	54	28.1	192	100.0
Foreign	Yemen	18	72.0	5	20.0	2	8.0	25	100.0
	Southern Yemen	16	80.0	3	15.0	1	5.0	20	100.0
	Nigeria	2	9.5	13	61.9	6	28.6	21	100.0
	Mali	1	11.1	6	66.7	2	22.2	9	100.0
	Foreign	37	49.3	27	36.0	11	14.7	75	100.0
Grand Total		130	48.7	72	27.0	65	24.3	267	100.0

...../Continued over

TABLE 9.5 (Continued)

(b) Detailed Breakdown of Motives

Motive	Native												Foreign						Grand Total			
	At-Talf Amirate		Al-Hijaz		Aslr		Najd		Saudi Arab		Yemen		Southern Yemen		Nigeria		Mali				Total Foreign	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Economic looking for job taking job transfer starting new business Army, Air Force, National Guard, Police	35	100.0	43	100.0	8	100.0	7	100.0	93	100.0	18	100.0	16	100.0	2	100.0	1	100.0	37	100.0	130	100.0
	6	17.2	9	20.9	2	25.0			17	18.2	15	83.3	7	43.8	2	100.0	1	100.0	25	67.6	42	32.3
	4	11.4	7	16.3			2	28.6	11	11.8											11	8.5
	2	5.7	2	4.7					6	6.5											6	4.6
	2	5.7	4	9.3					6	6.5	3	16.7	9	56.2					12	32.4	18	13.8
Social and Cultural religion own education child's education marriage joining relatives	21	60.0	21	48.8	6	75.0	5	71.4	53	57.0											53	40.8
	15	100.0	22	100.0	5	100.0	3	100.0	45	100.0	5	100.0	3	100.0	13	100.0	6	100.0	27	100.0	72	100.0
															11	84.6	5	83.3	16	59.3	16	22.3
	1	6.7	3	13.7	1	20.0			5	11.2											5	6.9
	3	20.0	5	22.7	1	20.0			9	20.0			1	33.3					1	3.7	10	13.9
Psychological attraction of At-Talf city dislike of previous place better life better climate retirement	11	73.3	14	63.6	3	60.0	3	100.0	31	68.8	5	100.0	2	66.7	2	15.4	1	16.7	10	37.0	41	56.9
	13	100.0	23	100.0	18	100.0			54	100.0	2	100.0	1	100.0	6	100.0	2	100.0	11	100.0	65	100.0
	3	23.1	5	21.7	2	11.1			10	18.5											10	15.4
	4	30.8	8	34.8	9	50.0			21	38.9											21	32.3
	6	46.1	10	43.5	6	33.3			22	40.7	2	100.0	1	100.0	6	100.0	2	100.0	11	100.0	33	50.8
					1	5.6			1	1.9										1	1.5	

Categories are adapted from United Nations, Methods of Measuring Internal Migration, Table 56, New York, 1970

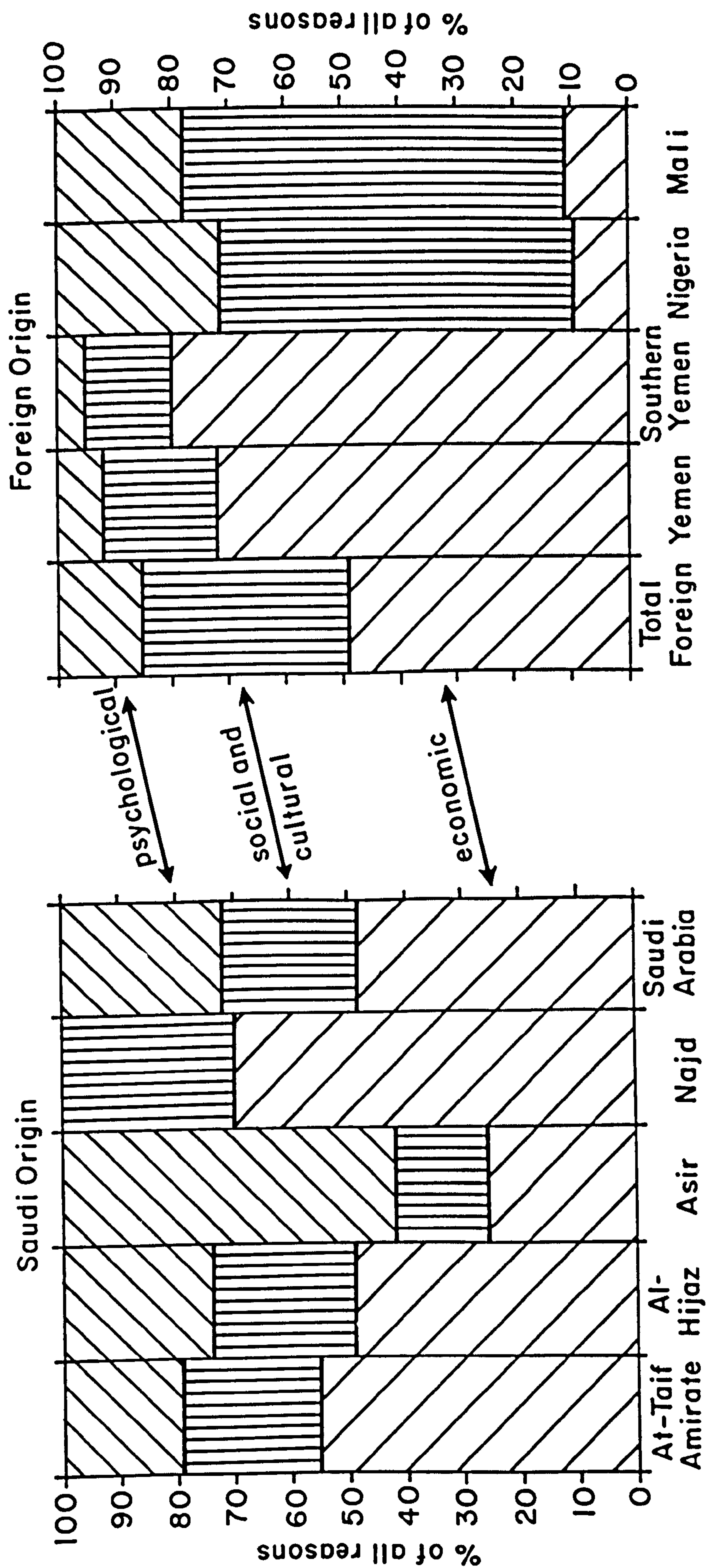
Source : Fieldwork, December 1975 to February 1976

as far as Saudi migrants are concerned. Differences are noticeable among regional groups, particularly among those areas which contribute least, Asir and Najd, 25.8% and 70.0% respectively (Table 9.5a and Figure 9.4). In the former case, psychological reasons are far more important; in the latter, joining the National Guard (which is an option with a purely tribal basis, not general conscription) is a major motivating factor. Those who were not sent to At-Taif city asked to be transferred to be near their kinsmen. Many of the others, who are not members of the National Guard, have since followed their relatives. When economic reasons are distinguished, the Army, the Air Force, the National Guard, and the Police appear to be specially attractive for all Saudi minority groups; the general motive of seeking employment in other sectors is distinctly less important. The low proportion who came with the intention of starting new businesses reflects a widespread preference for Government employment rather than private business, as well as, in many cases, simple shortage of capital.

Social and cultural reasons are almost as important as psychological reasons (23.4% and 28.1% respectively). Apart from those from Asir (16.1%), the percentage for each regional group are relatively similar: joining relatives is the dominant reason (73.3% in At-Taif Amirate, 63.6% in Al-Hijaz, 60.0% in Asir, and 100% in Najd). Marriage is second in importance, migration in every instance having taken place in order to marry cousins. Desire to educate children was the only other important motive; the householder's own education is never mentioned as a strong motive to move.

Psychological reasons, as well as economic reasons, vary in

Fig.9.4 ORIGIN OF REGIONAL MINORITY GROUP HOUSEHOLDERS, BY REASONS FOR PRESENCE IN AT-TAIF CITY



Importance between groups, with the two small regions contrasting strongly with the two most important contributory regions. As shown in Figure 9.4, psychological reasons overshadow the other two reasons as far as householders coming from Asir are concerned. This group comprises mainly migrants coming from the poor and neglected coastal Asir (61.3%) - not from the flourishing mountainous Asir - for whom At-Taif offered an apparently easier living. The people of the coast, unlike their neighbours of the mountains, are mainly drifters, casual workers or beggars, being reluctant to engage in permanent work; not one gave an economic motive as defined in Table 9.5b for his presence in At-Taif city.

(2) Foreign Groups

Householders of foreign minority groups make up 28.1% of all questioned householders. Economic motives predominate among those coming from the Yemen and Southern Yemen, 72.0% and 80.0% respectively. When sub-divided, it can be seen that immigrants are either looking for a job, or starting a new business. Looking for a job is twice as important for Yemenis compared with Southern Yemenis, whereas starting new businesses is three times higher for Southern Yemenis than for Yemenis. This is related to the different attitudes of the people for, while a good proportion of Yemenis are labourers, Southern Yemenis have more initiative and business acumen. Householders from Nigeria and Mali show practically no economic motive for migration; being originally pilgrims, their movements were motivated by non-economic factors.

Social and cultural reasons are of major importance for householders from Nigeria and Mali (61.9% and 66.7% respectively). When sub-divided, religion is a noticeable factor : 84.6% for Nigerians and 83.3% for Malis. Despite the great distances of foreign minority groups from their homelands, contacts remain strong. Yemenis and Southern Yemenis professed only secular reasons. The only social and cultural reasons given by householders from these two groups were joining relatives. Marriage as a cause of immigration is unimportant among foreign minority groups. While Southern Yemenis, Nigerians and Malis are mainly married, Yemenis are largely unmarried, as shown in Table 9.3.

Psychological reasons were found to be less powerful than the other two reasons, especially in the case of householders from the Yemen (8.0%) and Southern Yemen (5.0%) who, as mentioned above, appear to be almost single-minded in their 'mercenary' motive. They appear not to be particularly attracted to or attached to the city which offers them a living.

(3) Conclusion

The economic motive is generally the strongest, although a detailed breakdown reveals a picture of contrasts; for example, the strongest economic motive is linked to the desire to join the Army, the Air Force, the National Guard, or the Police, in the case of Saudis; but looking for general employment and starting new businesses are the exclusive economic motives among Southern Yemenis and Yemenis. Social and cultural reasons are overwhelmingly strong for

Nigerians and Malis (mainly because of religion) and reasonably important for other groups (mainly through the motive of joining relatives).

Psychological motives were reasonably important, except for the Yemeni and Southern Yemeni groups and for the Najd group among internal migrants. Within the sub-categories of the psychological motive, it is interesting to note the absence of any entry for reasons of retirement. Unlike the holy cities of Makkah and Al-Madīnah, At-Taif has not proved attractive to Saudis or non-Saudis as a place for retirement, despite its attraction as a summer resort.

Resultant Patterns in At-Taif City

An attempt will now be made to analyse the spatial distribution of minority groups in At-Taif city and its relation to the main theories of urban structure. This will be followed by a discussion of the processes underlying the distribution.

From Figure 9.5a, it appears that the 12 areas occupied by minority groups have a scattered distribution within At-Taif city, with two areas (10 and 11) in the core, three (6-8) within the eastern half of the city, and seven areas (1-5, 9, 12) situated on the northern and eastern fringes.

When sub-divided by national and ethnic characteristics, the distribution of minority groups exhibits a contrast in the degree of concentration (Table 9.6 and Figure 9.5 a and b). Areas 1 to 5 show little ethnic homogeneity, as they contain a mixture of Saudi tribes and sub-tribes. On the other hand, foreign minority groups are more strongly homogeneous and highly segregated, living in national groups.

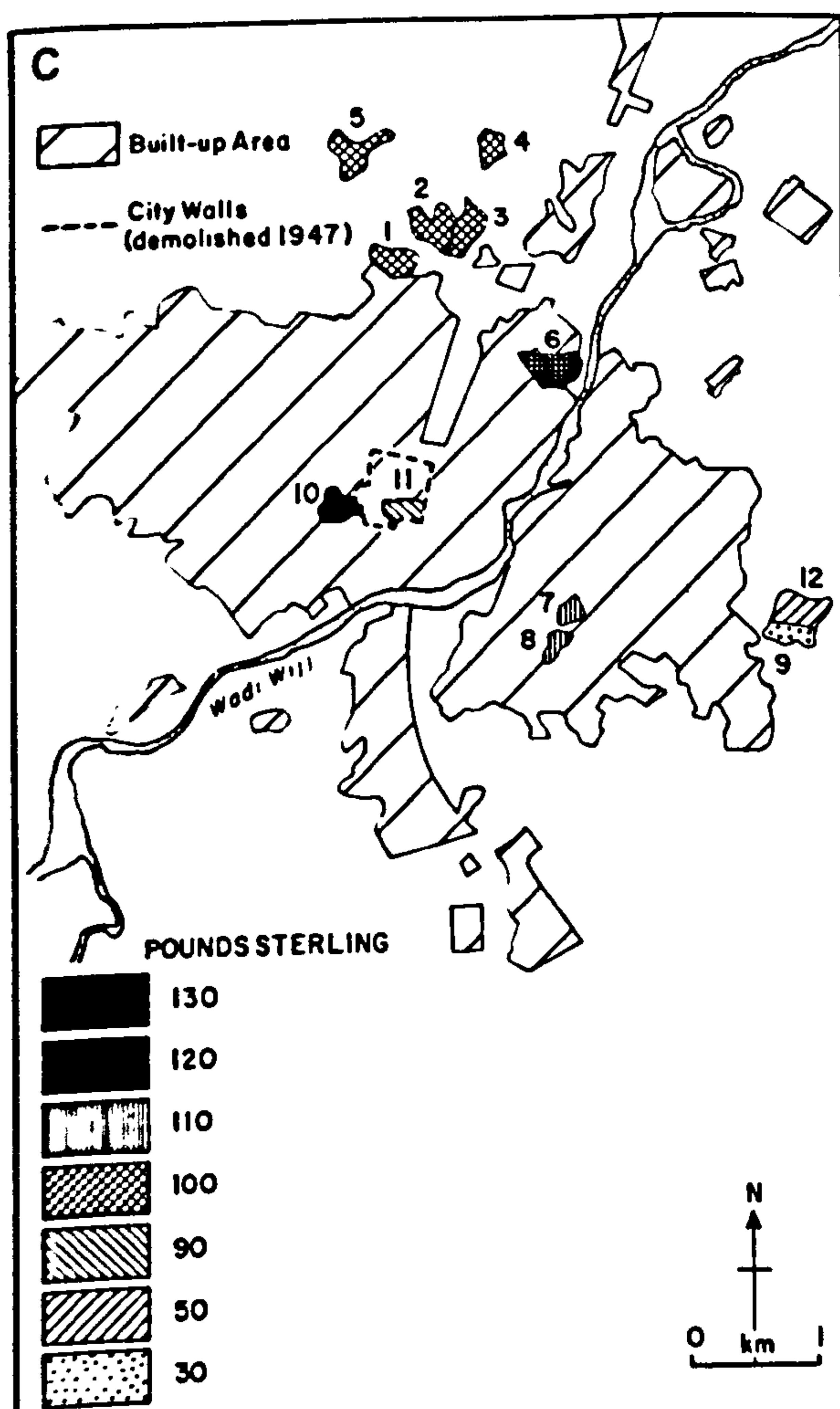
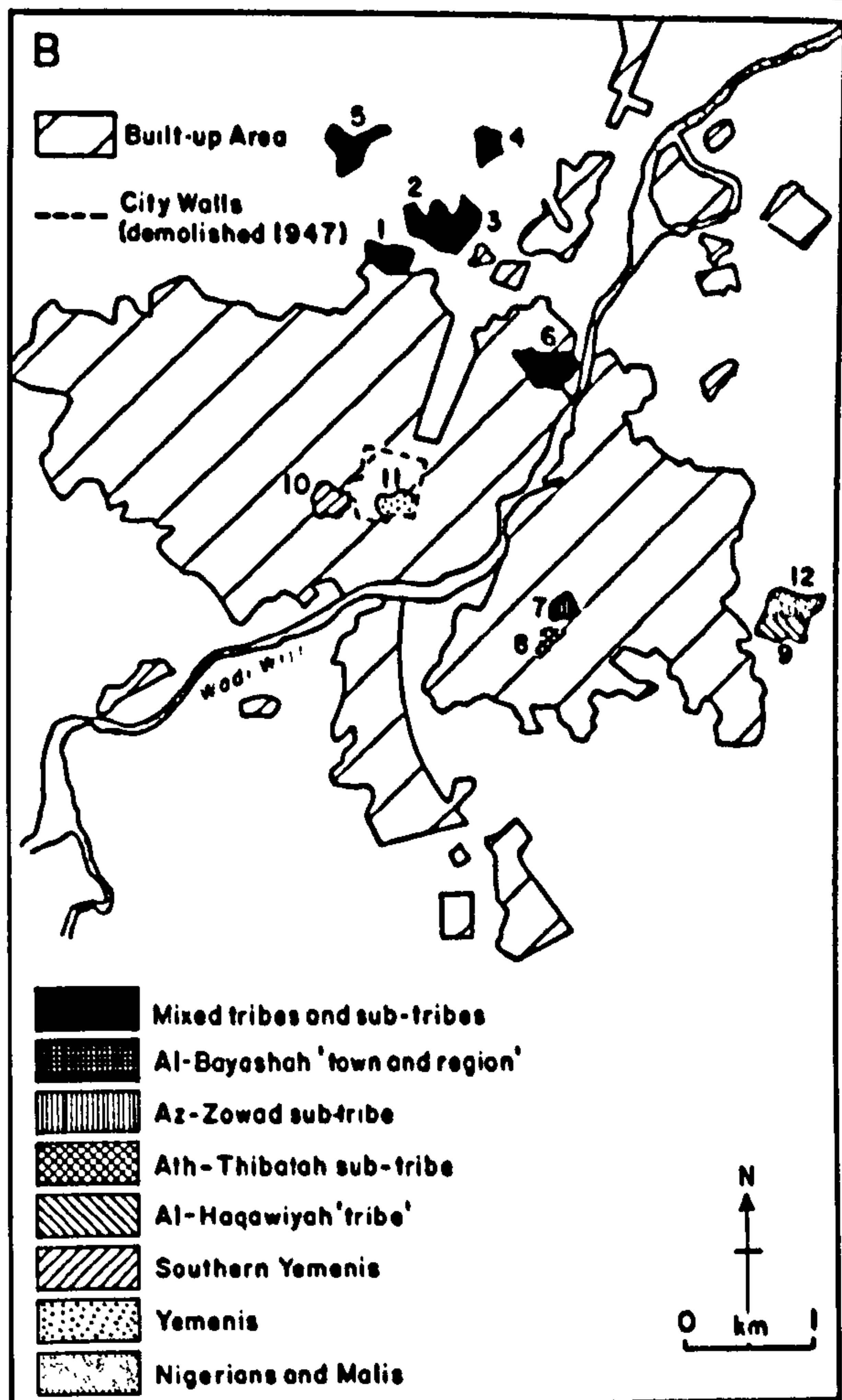
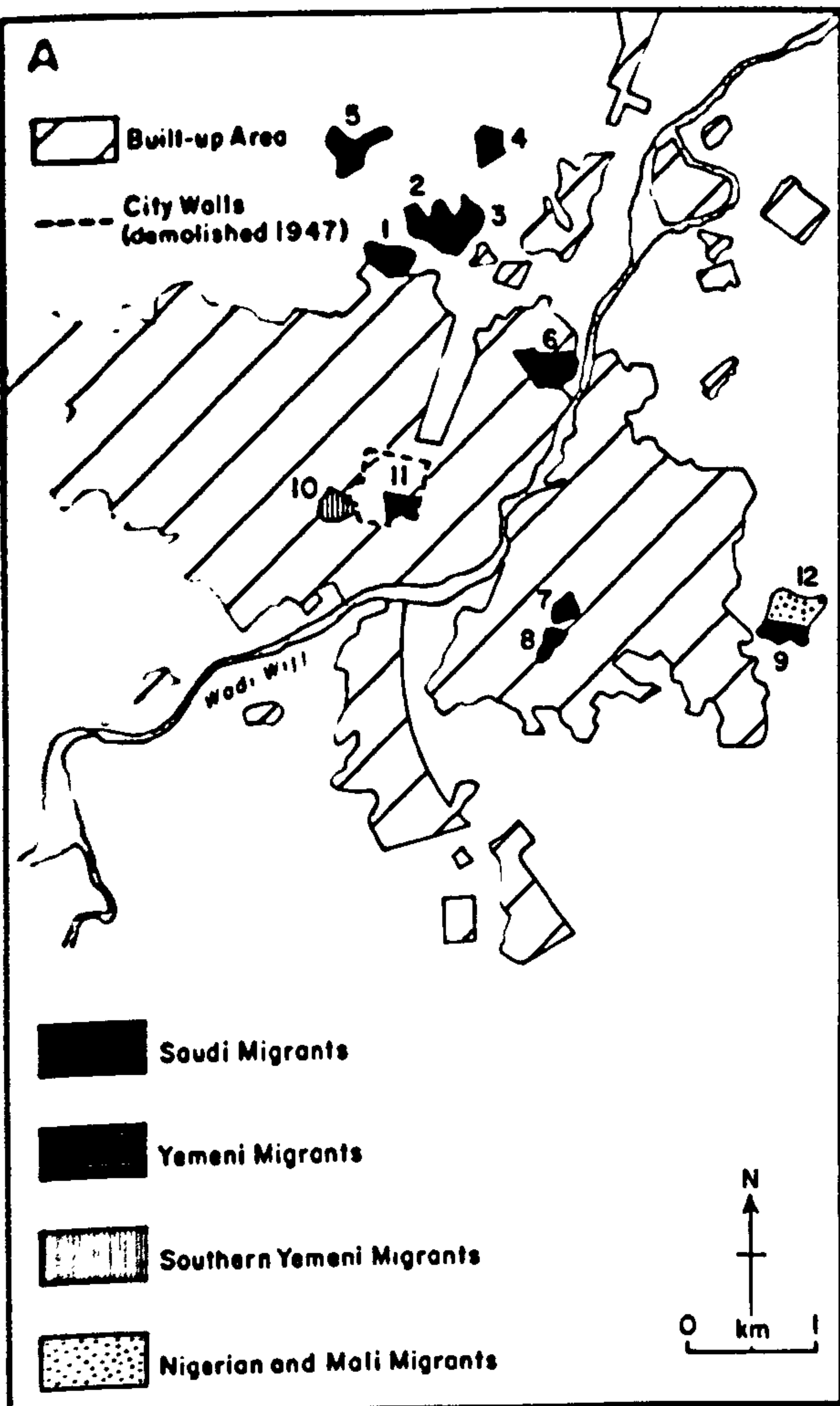


Fig 9.5

A National characteristics of minority groups, At-Taif City, 1975-1976. (*based on writer's fieldwork*)

B Ethnic characteristics of minority groups, At-Taif City, 1975-1976. (*based on writer's fieldwork*)

C Average monthly income in pounds sterling per householder, minority group areas, At-Taif City, 1975-1976. (*based on information from nakeebs*)

TABLE 9.6

Distribution of Minority Group Householders by National and Ethnic Characteristics, At-Talf City, December 1975 to February 1976

Area	Saudis					Southern Yemenis	Yemenis	Nigerians and Malis	Total
	Mixed tribes and sub-tribes	People from Bishah town and region	Az-Zowad sub-tribe	Ath-Thibatah sub-tribe	People from coastal Asir	People from Hadhramout	People from the Yemen Uplands	Takroris*	
1. Sharaqraq	34								34
2. Manfohah	18								18
3. Bin Sowallem	21								21
4. Ath-Thaqafah	16								16
5. Al-Madfaeiyah	29								29
6. Al-Bayashah		26							26
7. Az-Zowad			13						13
8. Ath-Thibatah				16					16
9. Al-Haqawiyah					19				19
10. Al-Hadharim						20	25		20
11. Al-Yomana								30	25
12. At-Takarnah									30
Total	118	26	13	16	19	20	25	30	267
Percentage	44.2	9.7	4.9	6.0	7.1	7.5	9.4	11.2	100

* Takror is a large sect extending from western Sudan to Senegal; see for details : Foodi, M bln (1780-1837), Infraq Al-Maisoor fi Tarikh Bilad At-Takroor, Cairo, 1964 (Arabic)

Source : Fieldwork, December 1975 to February 1976

Thus, Immigrants from Southern Yemen are together in one area, as are those from the Yemen, Nigeria and Mali.

When sub-divided by income, some differentiation is again witnessed between the minority groups. (There is little variation in estimated income per householder within any given area. *) Table 9.7 and Figure 9.5c give more detail of the extent to which incomes vary by area. The lowest monthly income per householder, £30, is found in area 9, inhabited by migrants from coastal Asir. The highest, £130, is found in area 10, inhabited by immigrants from Southern Yemen. This variation is better illustrated by comparing percentages of income and population, as represented by the number of householders interviewed (Fig 9.6). The outcome, the ratio of advantage,³ is larger than 1.0 for better-off groups (for example, 1.38 for Southern Yemenis), and lower than 1.0 for worse-off groups (for example, 0.32 for migrants from coastal Asir).

In summary, the distribution of minority groups is, first of all, in the eastern half of At-Taif city; secondly, it is well segregated; and, thirdly, the segregation is based on ethnic and national characteristics. Although none of these groups may be regarded as rich, income differences are noticeable. It is mainly relative poverty which makes these

* It is, not surprisingly, very difficult to obtain accurate replies to questions about income. Income is, firstly, regarded as a private matter; while, secondly, it is believed that however small an amount it may be, money will be 'hit' when discerned by the 'evil eye'. Estimates were given for each area by its nakeeb. No substantial differences are believed to exist within each group, and this hypothesis is supported by the similarity in appearance of households and of occupational structure (see Table 9.9) in each area.

TABLE 9.7

Estimated Average Monthly Income per Householder, Minority Group Areas,

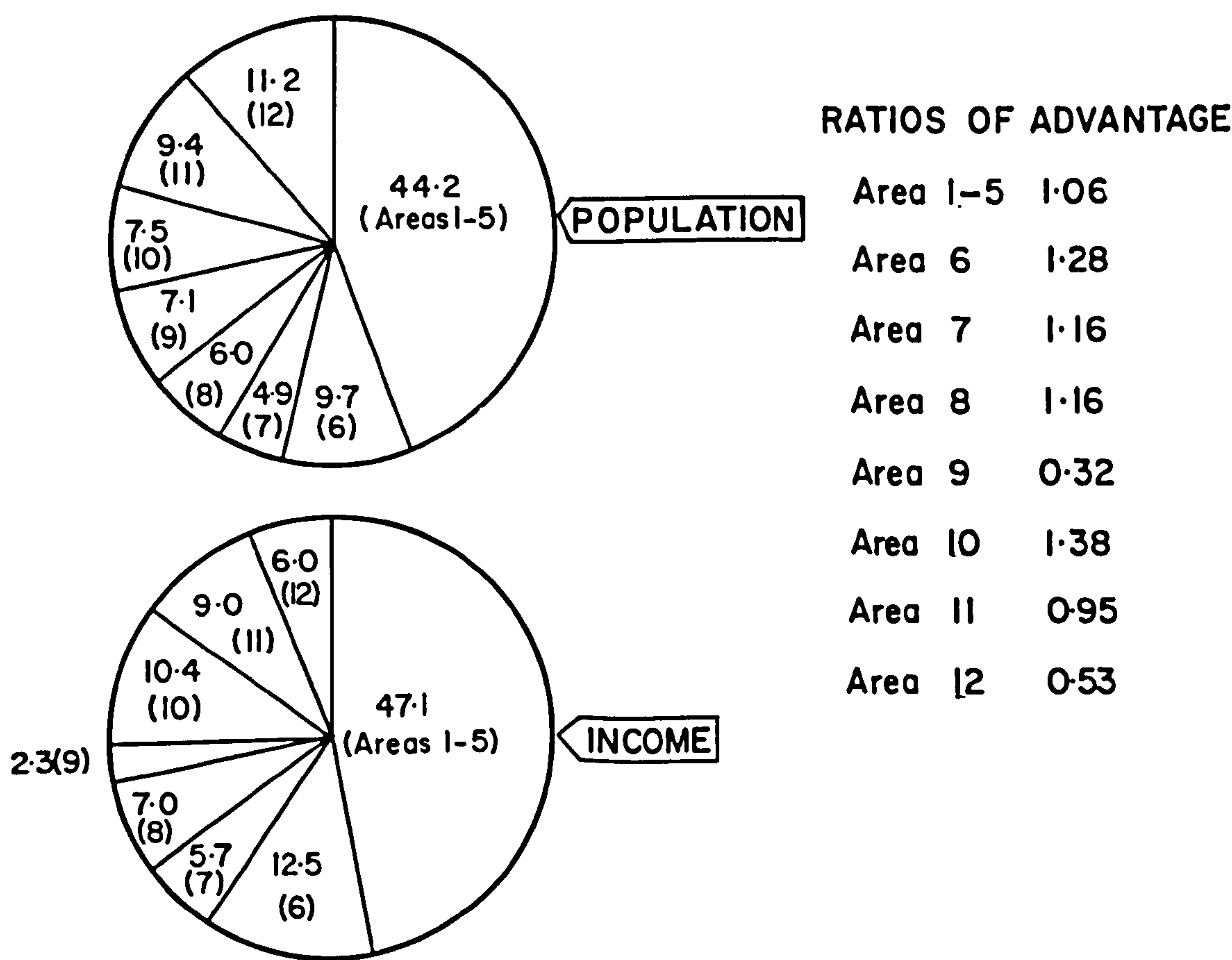
At-Talf City, December 1975 to February 1976

£30	£50	£90	£100	£110	£120	£130
Al-Haqawiyah	At-Takarnah	Al-Yomana	Sharaqraq Manfohah Bin Sowallem Ath-Thaqafah Al-Madfaelyah	Az-Zowad Ath-Thibatah	Al-Bayashah	Al-Hadharim

Source : Fieldwork - Information from nakeebs, December 1975 to February 1976

Fig.9-6

Distribution of householders and income among eight ethnic groups in At-Taif city 1975-76



minorities dwell away from the distinctive western half of the city (see pp 134-140). The strong ties binding the different peoples together make it most unlikely, almost inconceivable, that an individual would move outside his particular community.

It is interesting to consider this distribution in the light of the various theories of urban structure proposed by Burgess,⁴ Hoyt,⁵ and Harris and Ullman.⁶ Of the three, it can be seen that Hoyt's theory is probably the most realistic in the case of At-Taif city.

Although now classical,⁷ and developed for cities in the Western world, these theories provide the main generalised descriptive models available (Fig 9.7 a, b and c). A further point of importance is that data appropriate for testing more complex and sophisticated models of urban structure are simply not available in the case of At-Taif. Consequently, this study cannot match the technical sophistication of some recent works on urban structure characterised by the analysis of extensive data inputs, although the writer agrees with the statement that quantitative methods are ". . . the preferred approach to problems of defining sub-areas within the city and of identifying the main social dimensions of urban structure."⁸

These theories were formulated upon evidence from North American cities, and not specifically with reference to cities of the Third World, or Middle East cities. Applying such theories may thus be inappropriate, and these doubts have been elaborated by Hoyt,⁹ who identified the principal factors affecting the structure and growth of American cities as : (1) transportation, (2) immigration and internal migration, (3) steel frame skyscrapers and elevators, (4) desire

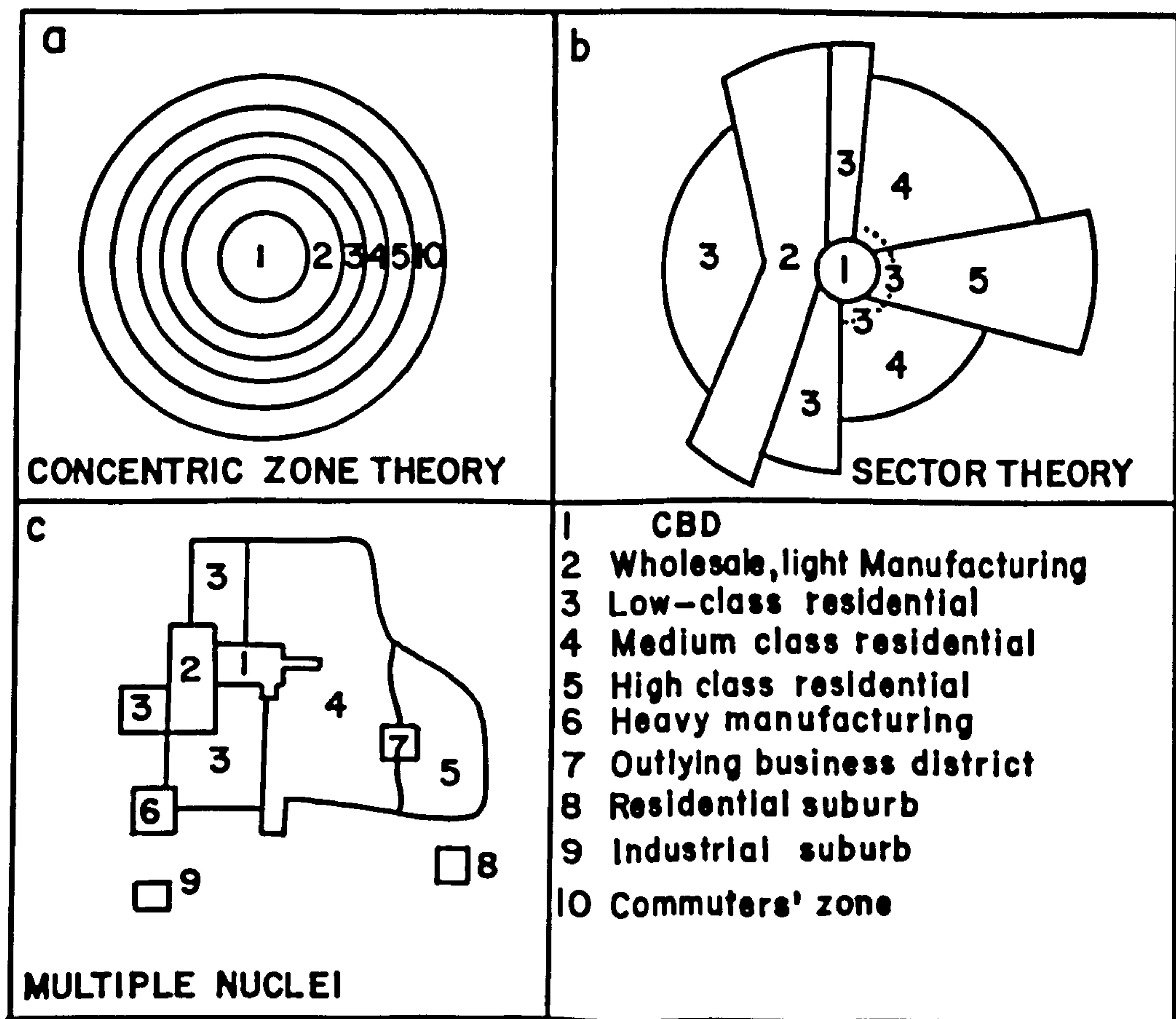


Fig9.7 GENERALIZATIONS OF INTERNAL STRUCTURE OF CITIES

After Harris, C.D. and Ullman, E.L., 1945

for single-family detached houses, (5) widespread distribution of wealth, and (6) universal ownership of automobiles. European and Asian cities, on the other hand, which he visited, contrasted with American cities in their social background and in their much longer evolutionary history. Furthermore, despite much recent morphological development, most European and Asian cities retain their original form and include, for example, many of the monumental buildings reflecting a long cultural and architectural heritage.

How far, then, can these findings be applied to At-Taif, a Middle Eastern city with a distinctive history and social background? Until the early 1940's, any development which took place - and this amounted to very little - was somewhat a matter of building on the existing site, within the walls, rather than outward growth, beyond them.* Old At-Taif, consequently, was distinguished by its narrow and crooked alleys as well as by its traditional indigenous building structure. By the end of World War II, when oil production had started to increase significantly, morphological change began to take place. The results of this were quite dramatic in that indigenous and traditional At-Taif has largely been demolished. In the name of 'progress', demolition has even included the city's monuments, proceeding from the walls and gates to the castle and even its two biggest mosques. The old city gradually disappeared, being replaced by the new one, parts of which grew spontaneously and parts being consciously planned. The new city has no 'flavour' of the

* See pp 65-67, Chapter 2

region's urban architectural heritage. At-Taif city, unlike - for example - Kuwait,* has been unlucky in the sense that its growth involved neither integration nor adaptation of what was best from the 'old order'.

The new At-Taif has spread quickly as a result of many factors, of which the increasing number of vehicles is a leading one. In 1971, 45% of the city's families had one vehicle, another 6% had two or more. Of the total vehicles, 82% were privately-owned motor cars, 4% taxis, 5% commercial vehicles, 8% motorcycles, and 1% buses.¹⁰

While the problem of distance is overcome with the availability of cars, other factors have also helped. The Government-owned Real Estate Development Fund gives interest-free loans to Saudis for construction and repairing purposes. Such procedures have been welcomed because building is regarded as the best and most desired form of investment. Hence, congestion is not a feature of already occupied areas, for newcomers soon start construction on the periphery of the city. (The inhabitants, who are influenced by Islamic traditions, prefer their own houses for privacy.) This, however, applies to Saudis only, for foreigners are not allowed to own property in Saudi Arabia unless they have a royal approval, which is extremely rare.¹¹ This situation has resulted in the majority of migrants owning their dwellings, whilst immigrants must rent theirs. The contrast in type of occupancy is an important factor in explaining the distribution pattern,

* See Carl Brown, L (ed) From Madina to Metropolis : Heritage and Change in the Near Eastern City, Princeton, 1973; in particular, Introduction, pp 15-47, and Chapter 6, pp 168-193

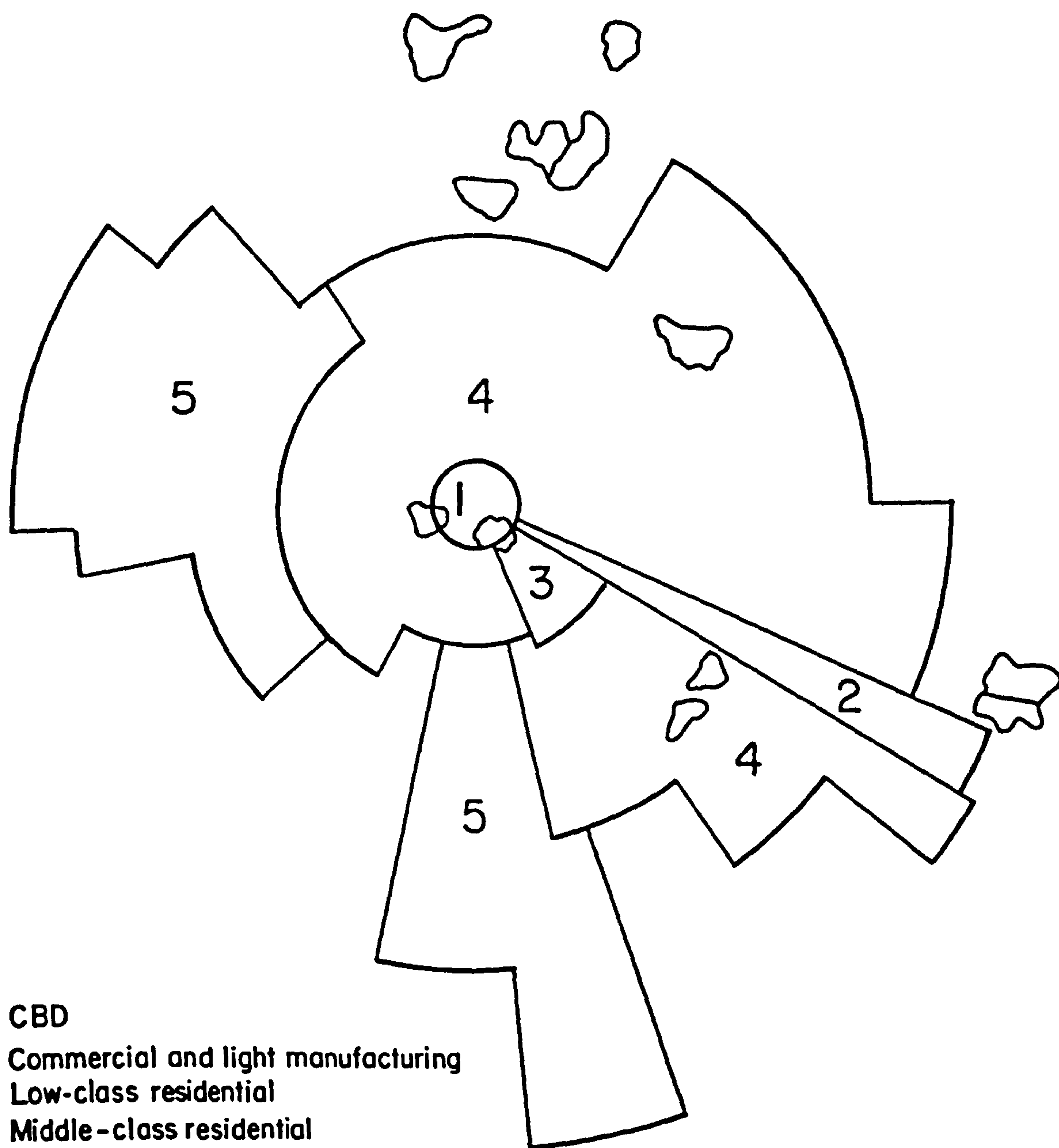
as will be seen later.

The city's population is not only growing because of natural increase, but also because of increasing in-migration, of both internal and foreign origin. It has been reported earlier that the percentage of householders born outside At-Taif city in 1966 was 37.6, which had increased by 1971 to the amazing percentage of 83.9. The percentage of householders born outside the city (but inside Saudi Arabia) had increased from 25.2 in 1966 to 49.1 in 1971; householders born outside Saudi Arabia at the same time rose from 12.4% to 34.8% (see Table 3.2).¹²

Thus, it would appear that an interplay of economic, social and cultural factors have resulted in the present structure of At-Taif city. This structure can now be reviewed in the light of the previously mentioned urban structure theories. It appears that At-Taif's structure (Fig 9.8) is closest to the sectoral theory rather than to the concentric zone and multiple nuclei theories, although it is stressed that none of the three singly provide a full explanation of the actual pattern, as will become evident in the following analysis of the city's structure.

Firstly, while At-Taif's centre is important to the degree that no other centres have developed in competition, it is at the same time an important residential area (see pp 124-125) and recreational area also (see p 258). Its commercial dominance may be instanced by the modern air-conditioned shopping centre, which was opened on the north-western fringe of the city in September 1974, but had to be closed down 13 months later because of a failure to attract customers (Plate 9.1). This happened despite the fact that the site is surrounded by a high-class

FIG.9-8 SCHEMATIC STRUCTURE OF AT-TAIF CITY, 1976



- 1 CBD
- 2 Commercial and light manufacturing
- 3 Low-class residential
- 4 Middle-class residential
- 5 High-class residential
- Minority groups



Plate 9.1

A disused modern air-conditioned shopping centre on the north-western fringe of At-Taif city. Page 307

residential area with high shopping potential.

Secondly, the city centre is not surrounded by a zone of transition in which business and light manufacturing industry encroach on residential areas; but instead a commercial and light manufacturing sector extends eastwards from the centre to where low- and medium-class residential areas exist. Again, extra floors above shops and workshops are used for residential purposes.

Thirdly, the rest of the city, which is almost exclusively residential, may be divided into low-, middle- and high-income classes, on the basis of rent and land prices, details of which were collected in early February 1976 from the city's 57 estate agents, and checked later with the head of the Municipality's Land Department. Average land values and rents are displayed in Figure 9.9 a and b. The pattern appears to combine concentricity with sectoral distortions.

Class divisions are also based on the general appearance of households in the city, and on the location of, for example, mansions and palaces. It was found that rich sectors were extending outwards to west and to south towards palaces of the royal family; towards open high ground; and along a newly constructed dual-carriageway. Although the use of the car has spread remarkably and mileage of asphalt roads is increasing, no higher income sectors were observed beyond the city's eastern fringe, which contains low- and medium-sector groups, or north where the land belongs to the Ministry of Defence and Aviation. Lack of eastwards extension can also be related to social values, particularly that of prestige, which totally outweighs cost and rent considerations.

Fig.9-9a AVERAGE LAND VALUES PER SQUARE METRE, 1976 (*Based on information from estate agents*)

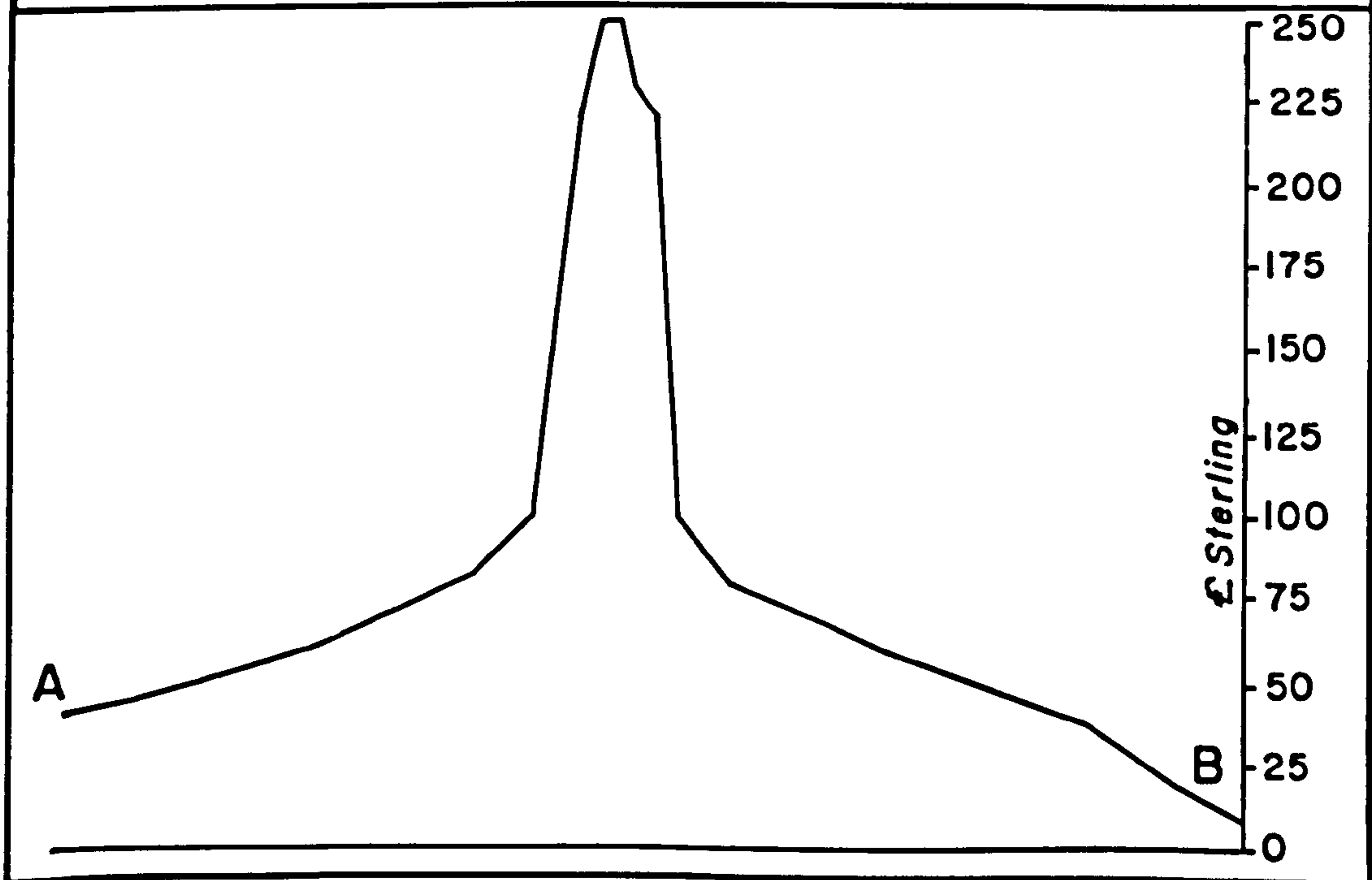
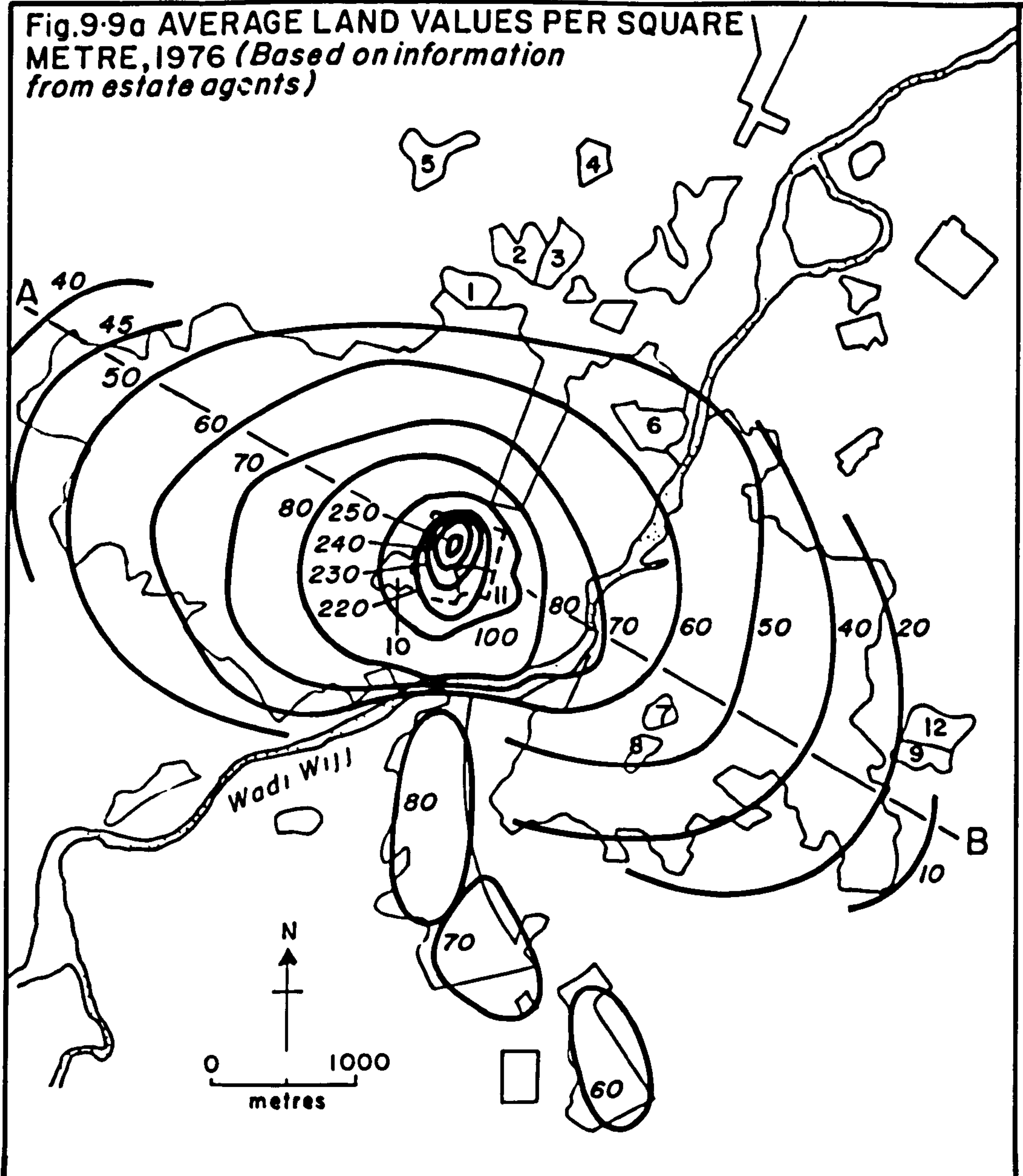
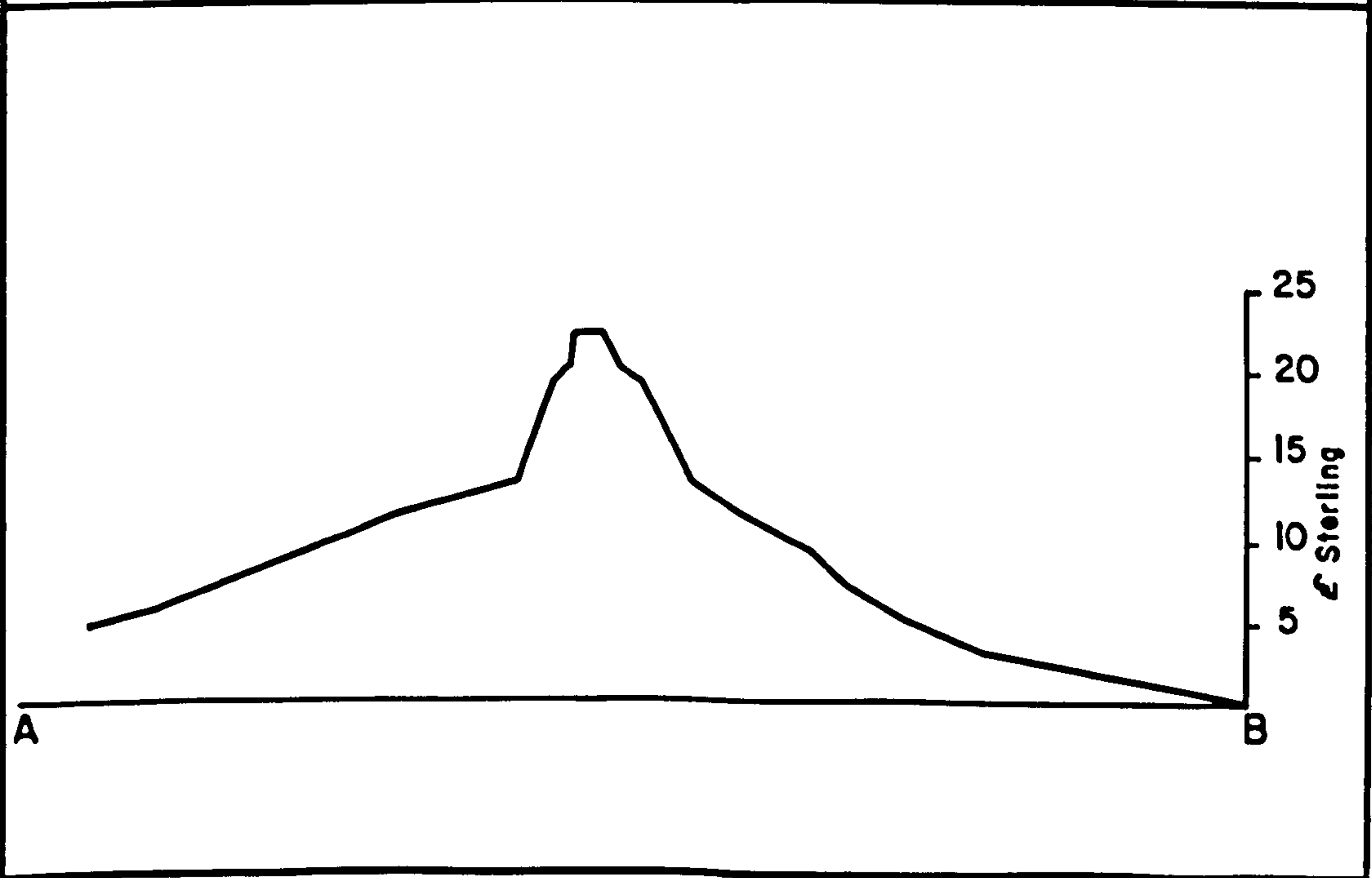
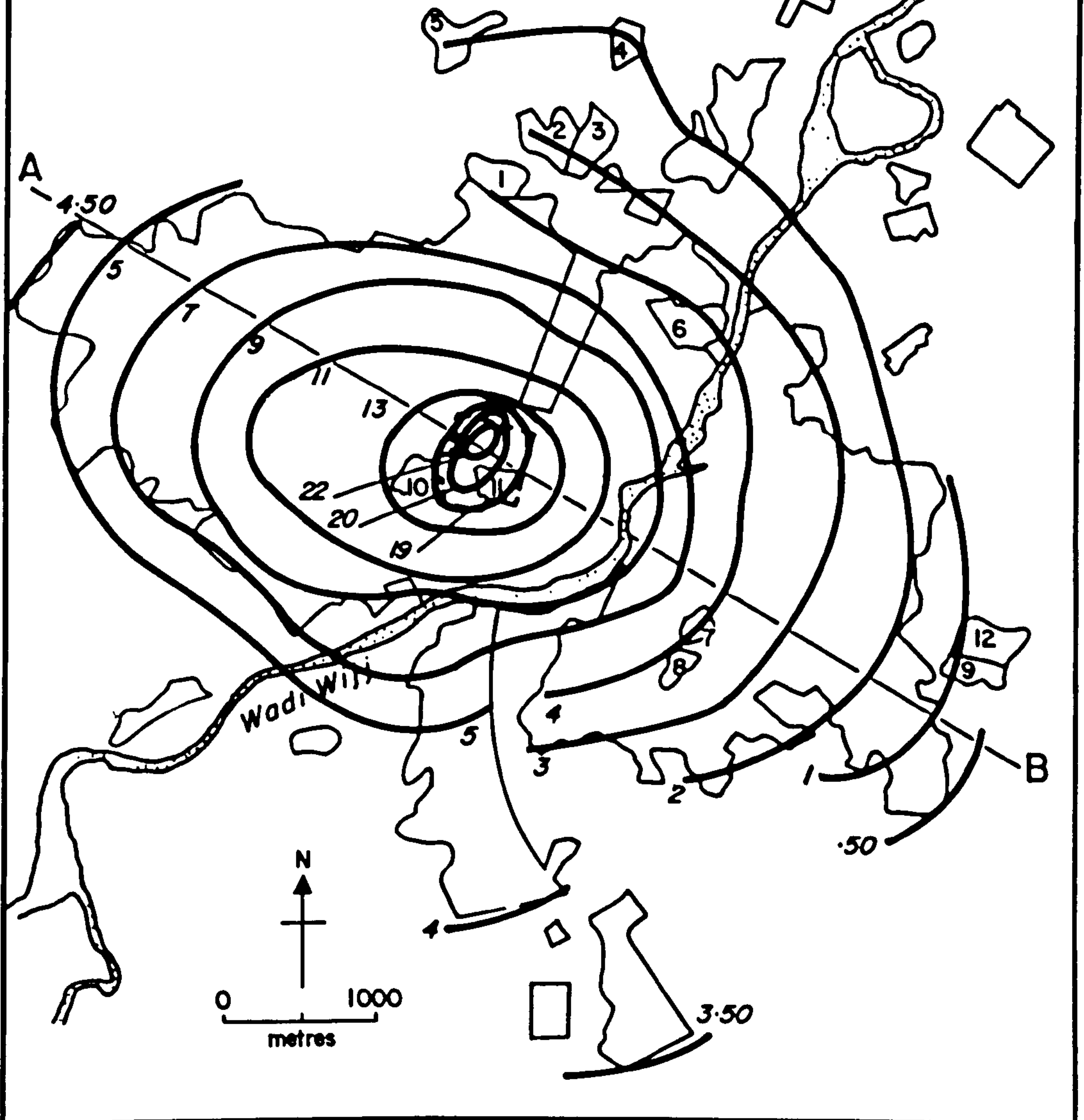


Fig.9.9b AVERAGE RENT VALUES PER SQUARE METRE, PER MONTH 1976
(Based on information from estate agents)



Fourthly, relying on the scanty and somewhat dated information of population density (Fig 3.1), it may be said that the rate of change of density declines with increasing distance from the centre of the city, while density in American cities is 'deconcentrated' : that is to say, it decreases in the central area and increases beyond it. At-Taif city bears greater resemblance to the pattern in Indian cities reported by Brush : ". . . where the highest density of population is found in a compact central area, situated in or adjacent to an indigenous bazaar".¹³ This is the pattern which he described as ". . . representative of the majority of Indian cities".¹⁴

Detailed Examination of Minority Group Distribution

The above general discussion of minority group distribution provides the background for a more detailed consideration of factors underlying the location and distribution of each minority group within particular areas of At-Taif city.

As far as areas 1-5 (which are located in the city's northern fringes) are concerned, it was shown in Table 9.6 that they contain a mixture of tribes and sub-tribes. They are largely personnel of the Ministry of Defence and Aviation, National Guard, and the Police. They have been accommodated here under these circumstances because the land belongs to the Ministry of Defence and Aviation. These people were initially given permission to build temporary structures for their dwellings. As time passed, however, the implementation and observation of such rules became slacker, a process which has not been impeded by these areas' nakeebs, who have turned a blind eye

to illicit construction. Other means have also been used, notably building behind the cover of the original wall of flattened tin which is used as a curtain until the new construction is well advanced (Plate 9.2). When, however, an action of this type has taken place too close to the asphalt road, the Municipality's bulldozers have been sent in to remove it (Plate 9.3). In an effort to obtain permanence for their holdings, the inhabitants asked the King to build them a mosque that will bear his name and to be located in the centre of their area. This, in fact, was done, despite the fact that Princess Al-Anood mosque was already in existence on the opposite side of the main road (Plate 9.4).

Areas 6 to 8 have a different case history to those of areas 1 to 5, as they do not accommodate a mixture of people (Table 9.6). Furthermore, these people have purchased their plots of land. As newcomers with relatives already here prefer such sites, the particular concentrations have expanded by the purchase of neighbouring dwellings belonging to 'foreigners'. A 'foreigner' dare not usually refuse such an offer, because he will otherwise find himself increasingly ostracised among the expanding community. (In addition to satisfying him with money, the purchasers come to "ask for the hand" of his property, this being the translation of the local word 'yokhtopoha' used for such an act.) Also, unlike areas 1 to 5, areas 6 to 8 are now located firmly within the built-up area. This was not always the case, for when the earliest inhabitants began to settle (Table 9.1), they settled on what was then the fringes of the city. This may be seen on Figure 2.3, which illustrates the city's growth.

Areas 10 and 11, which are situated in the city centre, are



Plate 9.2

Building has taken place behind the cover of a flattened tin wall
Page 310

Note the community water tanks

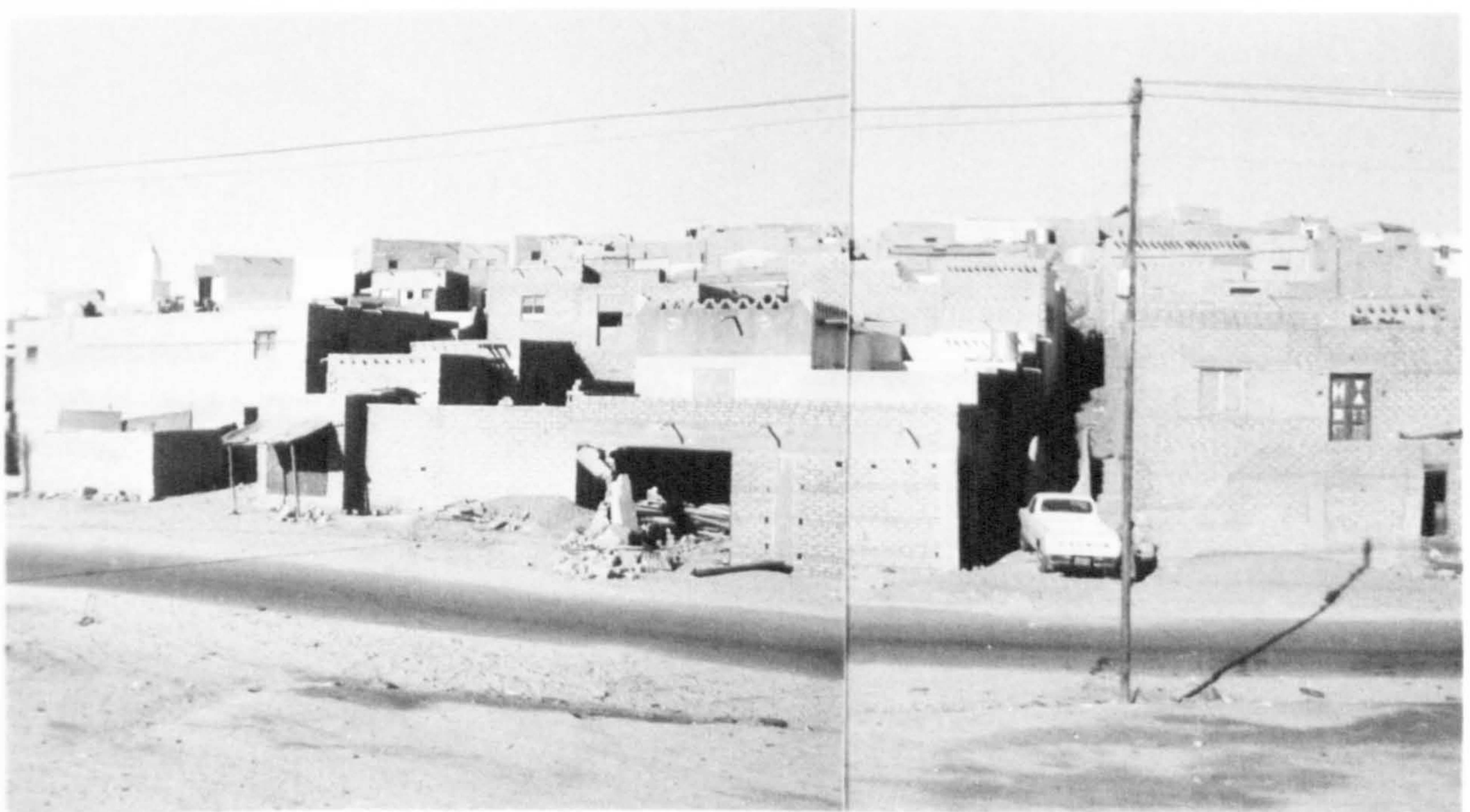


Plate 9.3

Structures which have encroached upon the asphalt road have
been bulldozed. Page 310



Plate 9.4

The proximity of two mosques in Bin Sowailem. Page 310

Note bundles of firewood for sale, and the nature of the houses at the front.

Inhabited by non-Saudis, by Southern Yemenis and by Yemenis respectively. This is a rented accommodation area in contrast to areas 1-8. Its landlords, who are usually well-established families of At-Talf, have deserted the city centre in favour of the western and southern parts of the city, where they can enjoy living in modern, villa-like buildings. The multi-storey buildings of the centre provide their owners with a continuous source of income, although it may at first appear surprising that the occupant-immigrants with their limited incomes (Table 9.7) can afford such high rents.

The Southern Yemenis are characteristically engaged in business in the city centre. By renting the whole building, a householder can keep the shop beneath it for his business, use the first floor as a warehouse, and reside with his family on the second floor. Extra floors or rooms are rented by him to families and single persons, but always of Southern Yemeni origin. This guarantees security to the person re-renting, and strengthens the ethnic homogeneity of the area. In the words of one interviewee, a fellow Southern Yemeni renter guarantees "not only a payment on time from a face that you and your family can trust, but also you can be sure of his aid and support".

For Yemenis, the case is slightly different, as the majority of these people are unmarried (Table 9.3). Hence a building which may be rented to one of them, is re-rented by that person in turn to dozens of his fellow countrymen, perhaps up to four in a room. Interviews showed that the person under whose name the building is rented, is most often the owner of a haberdashery shop beneath it - 14 interviewees out of 25. Being a shop owner, and not - for example - a shop assistant,

gives confidence to the landlord, for such a person may be contacted easily and is likely to reside in At-Taif for some time. As in area 10, all landlords have left the centre and gravitated towards the western and southern parts of the city.

Areas 9 and 12 present another contrast in both urban and social morphology. Here the standard of living is so low that the dwelling units consist of tin huts of poor quality, with a complete absence of basic services and amenities. These conditions are much worse in area 9, inhabited by migrants from coastal Asir (Plate 9.5a), than in area 12, inhabited by immigrants from Nigeria and Mali (Plate 9.5b). The land, which is the property of a native sub-tribe, is rented nominally. Both communities have been on their present site since 1968, following a succession of enforced moves from one site to another within the city as a result of the outward growth of the built-up area.

Information was more difficult to obtain for the inhabitants of these shanty sites, since no written records of movements within At-Taif city have been kept, even by the Municipality, or by the Department of Passports and Nationality. However, after noisy and lengthy discussions, the writer managed to collect what he considers to be reasonably reliable information on the reception areas, and on these people's movements within At-Taif city. This information is shown in Figure 9.10.

The first noticeable waves of immigrants from Nigeria and Mali arrived in At-Taif city towards the end of the Second World War. They settled on two sites, to the south and south-west of the city walls. The

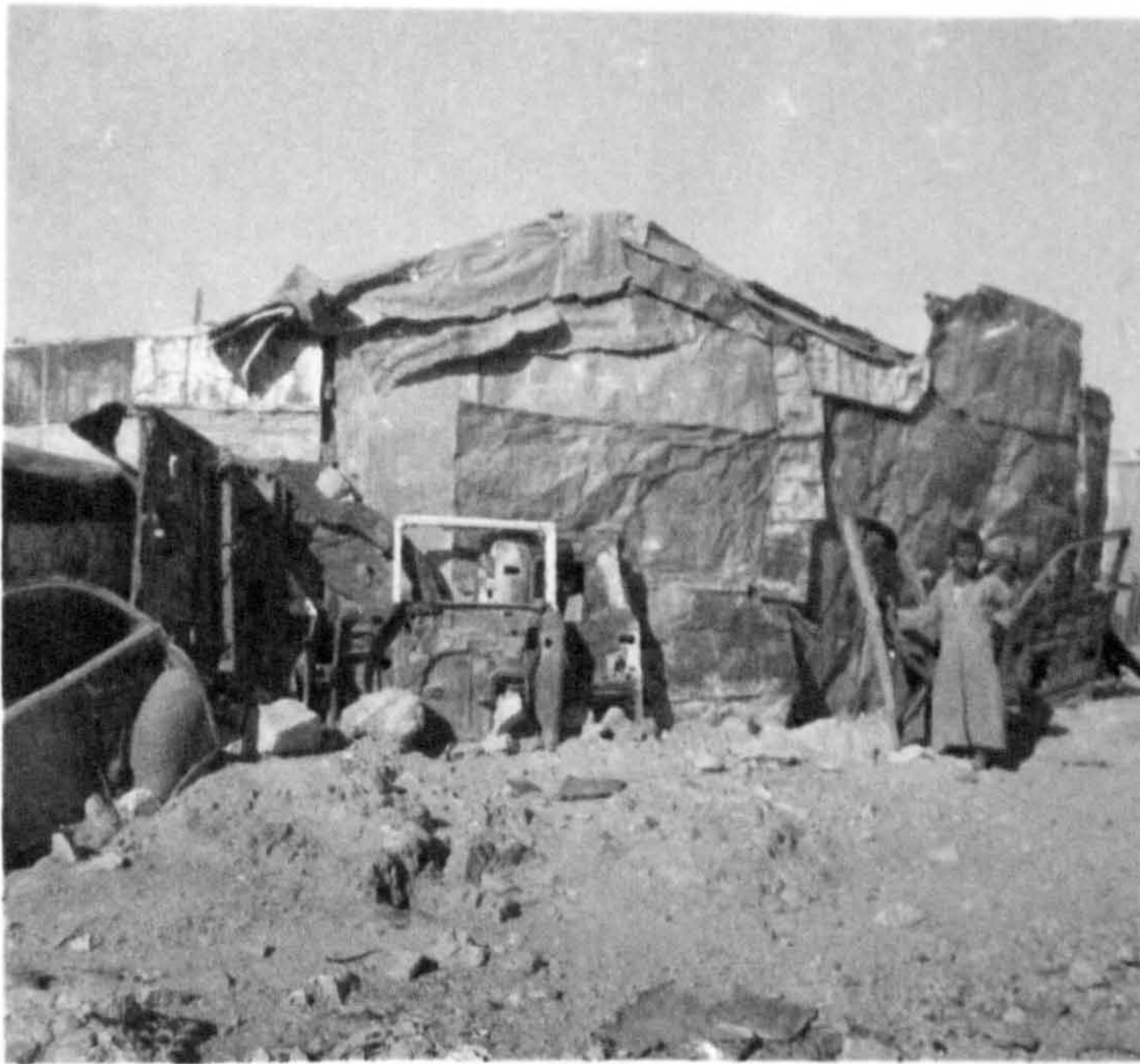


Plate 9.5 a and b

Living conditions above in area 9, and below
in area 12. Page 312

Note also below the community water tanks.

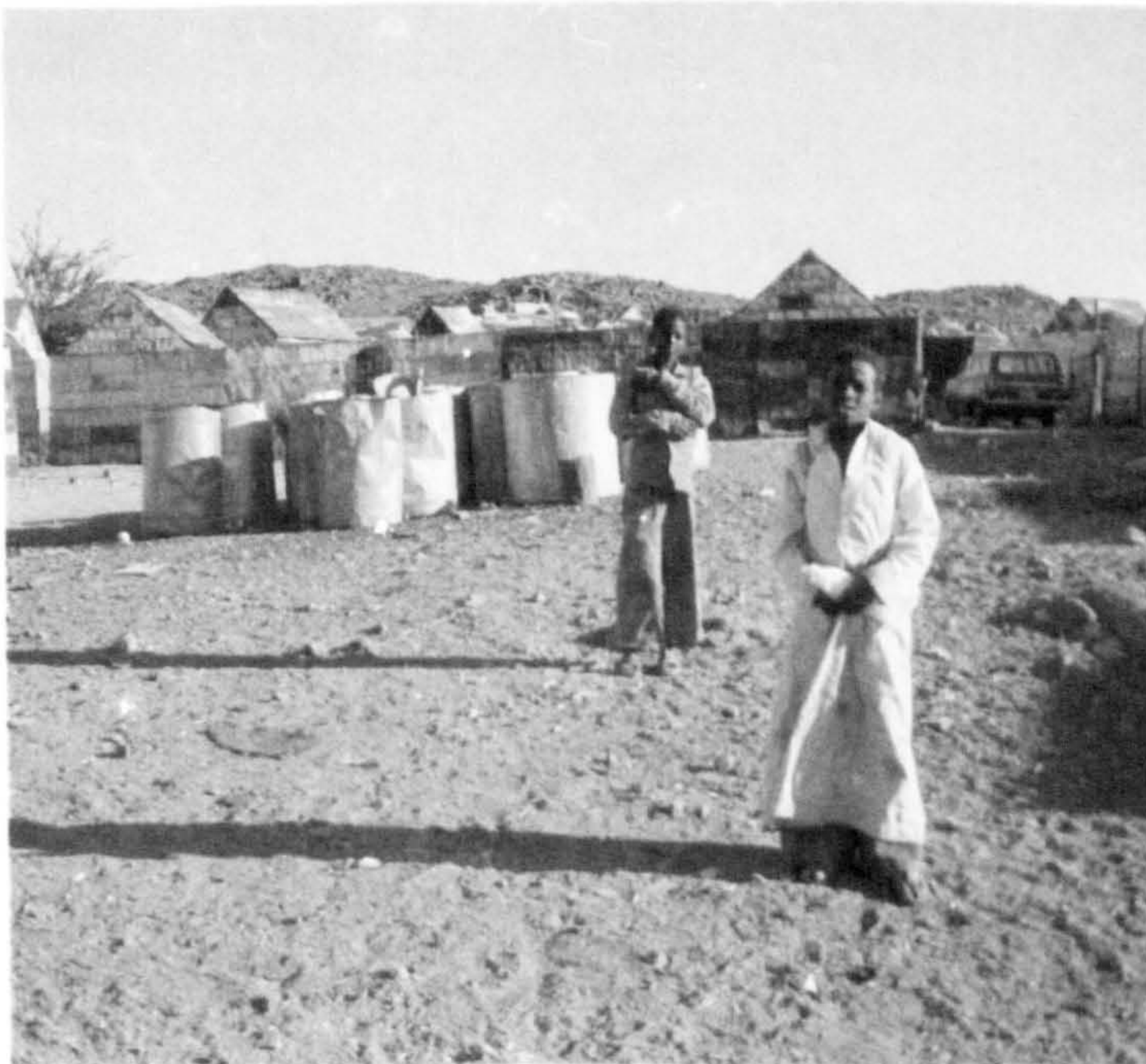
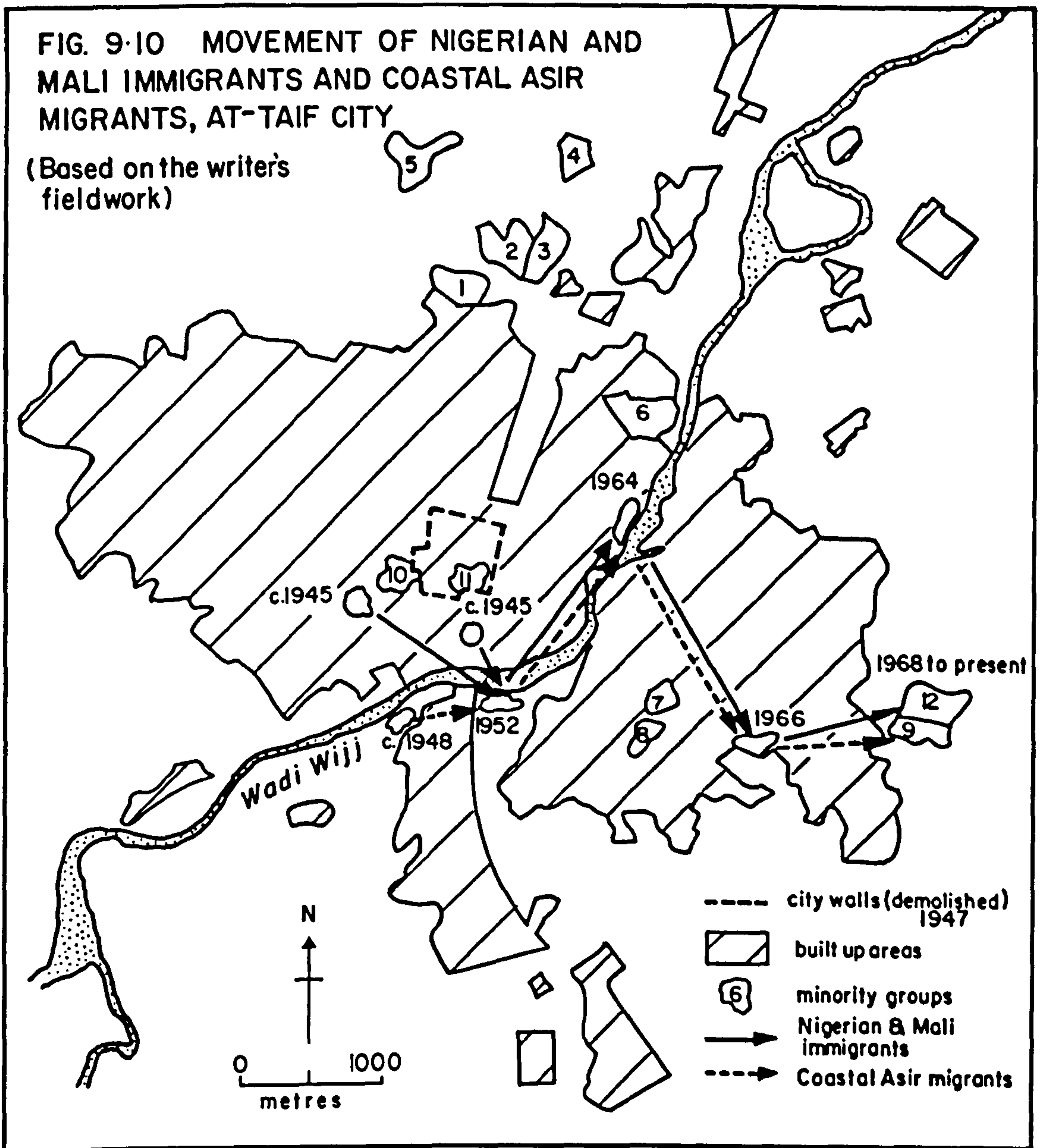


FIG. 9.10 MOVEMENT OF NIGERIAN AND MALI IMMIGRANTS AND COASTAL ASIR MIGRANTS, AT-TAIF CITY

(Based on the writer's fieldwork)



fact that they chose two sites was not an outcome of internal segregation between these people, but rather a matter of space availability. However, because of the ugly appearance of such shanty sites, landowners and neighbours began to put pressure on the Municipality to remove them. Such pressure was successful, so that in 1952 they were directed towards disused agricultural holdings across the wadi. Here, migrants from coastal Asir joined them after they too were evicted from a nearby site. By 1964, both communities had been forced to transfer to a vacant site further downstream of the wadi where they remained for another two years. After a disastrous fire, all were directed by the Municipality once more to a site on the eastern fringes of the city. After only another two years, however, they were ordered off this site when the sub-tribe of Waqdan succeeded in its claim to legal ownership of the area. Hence they were removed to their present site, located just outside the built-up area, to live in two areas divided officially by the Municipality by a mere physical strip of 10 metres. (The social space between them, however, is much wider, as will be discussed later.) Even the present site is considered temporary by the Municipality; several years ago they were told that a permanent site on Government land to the north-east of the city would be provided, although nothing as yet has transpired.

A cycle of residential succession may be recognised in the mobility of coastal Asir migrants (area 9) and Nigeria-Mali immigrants (area 12) in At-Taif city, with the parallel replacement of the city centre's well-established families by immigrants from the Yemen (area 11) and Southern Yemen (area 10). On the other hand, the

people of other areas (that is, 1 to 8) are in the areas of initial settlement.

The central areas, 10 and 11, were formerly inhabited by At-Talf's original inhabitants who, as a result of recent improved standards of living and changed attitudes and values, have moved away to the newer and better parts of the city, located to the west and south. Their move was stimulated by the great demand for their property, either for residential purposes or warehouses from Southern Yemenis and Yemenis. The centre was the reception area for the bulk of Southern Yemenis : replies to questionnaires showed that 72% of householders settled in the centre upon arrival, whereas the rest (28%) have been drawn here from various areas outside the centre. In contrast, 80% of the Yemeni householders have moved to the centre (area 11) from other parts of the city, practically all since 1973. Only 20% settled here directly upon arrival and thereupon attracted others. In 1973, there were no areas in At-Talf city where Yemenis were concentrated as they were widely scattered and were to be found where cheap accommodation existed. Today, they are still scattered, with the exception of those engaged in business, which particular concentration has been accentuated by large numbers of Yemeni businessmen occupying one building, in order to pay high city centre rents.

Although areas 9 and 12 presently occupy sites which were originally uninhabited, their previous sites have since been taken over by a mixture of people, and distinctive segregation no longer exists here. This statement is based on visits to these areas and

talking to their nakeebs. It appears that this situation is related to the fact that these sites were divided into plots and offered for sale at high prices, and this in turn attracted a mixture of purchasers.

Degree of Integration

The degree of integration between minority groups, as well as with other inhabitants of At-Taif city is thought to be limited. This statement is based on frequently heard conversations which show great interest in, and place much significance on, one's kinship and origin. To find out as much as possible about the degree of integration, householders of minority groups were asked a question related to the pre-marriage relationship between them and their wives. Replies are categorised in Table 9.8. It shows that marriages within family, clan, and tribe circles are overwhelmingly preferred to those outside. 34.2% reported marrying from within the same family, 37.3% from the same clan, and 25.9% from the same tribe. This leaves a very small proportion of those unrelated, marrying from within the same residential area (0.4%) or from the same country (2.2%). These are, however, summary percentages, but figures do not vary significantly from one area to another.

Nevertheless, two interesting points emerge that all Saudi migrants, except one, married relatives. The only householder whose wife was not a blood relative (except that she originated from the same area) had come from Al-Bayashah : area 6. This was the earliest area to be established by minority groups in At-Taif city, as shown in Table 9.1. It could thus be suggested that the one marriage arose from

TABLE 9.8

Distribution of Minority Group Married Householders by Pre-Marriage Relationship

with their Wives, At-Taif City, December 1975 to February 1976

Area	Same Family		Same Clan		Same Tribe		Same Residential Area		Same Country		Total
	No	%	No	%	No	%	No	%	No	%	
1. Sharaqraq	17	50.0	11	32.3	6	17.7					34
2. Manfohah	6	35.3	9	52.9	2	11.8					17
3. Bin Sowailem	10	52.6	3	15.8	6	31.6					19
4. Ath-Thaqafah	4	30.8	6	46.1	3	23.1					13
5. Al-Madfaeiyyah	11	39.3	9	32.1	8	28.6					28
6. Al-Bayashah	7	31.8	5	22.7	9	41.0	1	4.5			22
7. Az-Zowad	5	41.7	7	58.3							12
8. Ath-Thibatah	5	31.2	11	68.8							16
9. Al-Haqawiyah	6	37.5	8	50.0	2	12.5					16
10. Al-Hadharim	6	37.5	3	18.7	6	37.5			1	6.3	16
11. Al-Yomana	1	12.5	5	62.5	2	25.0					8
12. Al-Takarnah			8	29.6	15	55.6			4	14.8	27
Total	78	34.2	85	37.3	59	25.9	1	0.4	5	2.2	228

Source : Fieldwork, December 1975 to February 1976

casual contact through living in the same area; and the whole situation indicates the relative newness of the community. The second point relates to foreign minority groups, in which one Southern Yemeni and four Takroris reported that their wives were from the same country but not from the same family, clan or tribe. Such people who could not find a related partner nevertheless chose one that originated from the same homeland.

The high degree of concentration among each minority group may also be understood through a discussion of their occupational structure. As shown in Table 9.9, the majority of questioned householders in areas 1 to 5 are personnel of the Army, Air Force, and the National Guard. Whilst 55.9% of area 1 householders when questioned were found to be members of the armed forces, areas 2 and 3 contain 77.8 % and 80.9% respectively, and in areas 4 to 5 the figure reaches 100%. Such a concentration of people in one particular type of occupation is not only related to the fact that these areas belong to the Ministry of Defence and Aviation, which has given permission to these people, as employees, to settle, but it also related to another fact - namely that people tend to 'copy' the same type of work as earlier migrants - again emphasising the strong ties between them. All 18 householders who reported their occupations to be in the Government were more specifically members of At-Taif police.

Areas 6 to 8 also show a bias, though of different occupations this time. Here, 42.3%, 46.1% and 37.5% of the questioned householders were Government employees. The second most common type of occupation was that of running a business. Area 9 exhibits a unique situation

TABLE 9.9

Distribution of Minority Group Householders by Occupational Structure, At-Talf City,December 1975 to February 1976

Area	Employee in Government		Member of Armed Forces		Shopkeeper		Own Lorry/ Taxi Driver		Labourer		Barber		Sweeper		Beggar		Others		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
1. Sharaqraq	12	35.3	19	55.9	1	2.9	2	5.9											34
2. Manfohah	4	22.2	14	77.8															18
3. Bin Sowailem	2	9.5	17	80.9	1	4.8	1	4.8											21
4. Ath-Thaqafah			16	100.0															16
5. Al-Madfaeliyah			29	100.0															29
6. Al-Bayashah	11	42.3	5	19.2	8	30.8	1	3.8									1	3.8	26
7. Az-Zowad	6	46.1	1	7.7	3	23.1	3	23.1											13
8. Ath-Thibatah	6	37.5	2	12.5	5	31.2	2	12.5					6	31.6	11	57.9	1	6.3	16
9. Al-Haqawiyah																	2	10.5	19
10. Al-Hadharim					16	80.0											4	20.0	20
11. Al-Yomana					14	56.0			6	24.0	1	4.0					4	16.0	25
12. At-Takarnah					7	23.3	3	10.0	5	16.7	12	40.0					3	10.0	30
Total	41	15.4	103	38.6	55	20.6	12	4.5	11	4.1	13	4.9	6	2.3	11	4.1	15	5.6	267

Source : Fieldwork, December 1975 to February 1976

where 57.9% of its questioned householders reported that God was their chief economic supporter, which in reality means that they are no more than beggars. Such a high percentage in this category explains the poverty which prevails in this area.

Areas 10 to 12, which are inhabited by foreign minority groups, show yet another type of occupational bias : 80.0% and 56.0% of Southern Yemenis and Yemenis respectively were engaged in business, while 23.3% of the Nigerians and Malis were engaged in business, 40.0% of them being barbers. This job, which is carried out usually outside, on the side of the street (see Plate 4.7), attracts the low income inhabitants of At-Talf, because of low charges involved.

Another example of the high degree of concentration among each minority group is provided by data shown in Table 9.1. It appears, in the case of both Saudis and non-Saudis, that even if a member of a certain community happened to be born and then grow up outside his homeland, he would on return still settle among his own people. Several examples of this phenomenon were encountered during data collection. The most striking two, however, were found in areas 10 and 11, inhabited by immigrants from Southern Yemen and Yemen respectively. A householder in the former area, whose nationality is Southern Yemeni, reported his birth place to be in Java in Indonesia. The second example came from area 11. A householder, whose nationality is Yemeni, reported his birth place to be in Aden, Southern Yemen.

In answer to the question why they had moved to the present area, 66.3% of householders of minority groups expressed a preference to live amongst their kinsmen. The rest gave the following reasons :

forced move (14.2%), proximity to city centre (17.6%), and low rents (1.9%) - details of these summary percentages are shown in Table 9.10. The high percentage of those who prefer to live among relatives emphasises the significance of and power of segregation. This can also be measured by quoting typical statements given by these people during interviews. "If you go away, then your family's honour and property are guarded If you celebrate a marriage, then they will help If you are passing through a time of sorrow, then they will share If you are in debt, then they will help . . ."

News travels fast in these communities, and the entire community will know at once if, for example, a guest (from the homeland) has arrived, one has married, become ill, or celebrated circumcision. "Do you move if you are pleased with your neighbours who are also your cousins?" "I do not want to move even to Al-Khalldiyah" (the most modern and well-kept quarter in At-Taif city which is almost exclusive to members of the royal family) are typical comments.

To measure the degree of integration further, householders of minority groups were asked a question related to their preference to move to another area if they had the choice. As few as 62 of the 267 householders (23.2%) reported their willingness to move. Of these willing to move, 27 (43.5%) were found scattered throughout areas 1 to 5 (see, for details, Table 9.11), which are inhabited by a mixture of people. They said that they would prefer to move to particular sections within 1 to 5, because more of their kinsmen were living there, even though this would often involve a move of only a few houses. The rest, that is 35 householders (56.5%), inhabit areas 9 and 12, situated

TABLE 9.10

Distribution of Minority Group Householders by Reason for Presence in their Areas,
At-Talf City, December 1975 to February 1976

Area	Living amongst Kinsmen		Forced Move		Proximity to City Centre		Low Rents		Total
	No	%	No	%	No	%	No	%	No
1. Sharaqraq	31	91.2			3	8.8			34
2. Manfohah	17	94.4	1	5.6					18
3. Bin Sowallem	21	100.0							21
4. Ath-Thaqafah	16	100.0							16
5. Al-Madfaeliyah	29	100.0							29
6. Al-Bayashah	19	73.1			7	26.9			26
7. Az-Zowad	10	76.9			3	23.1			13
8. Ath-Thibatah	15	93.7			1	6.3			16
9. Al-Haqawliyah	1	5.3	16	84.2			2	10.5	19
10. Al-Hadharim	4	20.0			16	80.0			20
11. Al-Yomana	7	28.0			17	68.0	1	4.0	25
12. At-Takarnah	7	23.3	21	70.0			2	6.7	30
Total	177	66.3	38	14.2	47	17.6	5	1.9	267

Source : Fieldwork, December 1975 to February 1976

TABLE 9.11

Distribution of Minority Group Householders by Preference to Move to Another Area

if they had the Choice, At-Talf City, December 1975 to February 1976

Area	No Desire to Move		To be amongst Kinsmen		To be near City Centre		Not Clear		Total
	No	%	No	%	No	%	No	%	No
1. Sharaqraq	32	94.1	2	5.9					34
2. Manfohah	12	66.7	6	33.3					18
3. Bin Sowailem	16	76.2	5	23.8					21
4. Ath-Thaqafah	7	43.8	9	56.2					16
5. Al-Madfaeiyah	24	82.8	5	17.2					29
6. Al-Bayashah	26	100.0							26
7. Az-Zowad	13	100.0							13
8. Ath-Thibatah	16	100.0							16
9. Al-Haqawiyah	8	42.1			11	57.9			19
10. Al-Hadharim	20	100.0							20
11. Al-Yomana	25	100.0							25
12. At-Takarnah	5	16.7			24	80.0	1	3.3	30
Total	204	76.4	27	10.1	35	13.1	1	0.4	267

Source : Fieldwork, December 1975 to February 1976

next to each other on the eastern fringes of the city. These people complained of the distance between them and the city centre.

Nevertheless, the writer's attention was drawn to the fact that such a move to the city centre or thereabouts would be out of the question unless it involved their whole community.

It was between areas 9 and 12, however, that scarcely any integration has been observed. No contacts at any level were reported or seen by the writer between migrants from coastal Asir (area 9) and immigrants from Nigeria and Mali (area 12), even though a mere ten metres separates them. Even their children play their football games separately. Separatism is accentuated by the fact that each group has completely different attitudes and values, even a different language. Because of their continuous conflicts over water, the Ains and Wells Department supply them separately and on different days. Other confrontations occur frequently concerning their children, in the problem of stolen tin sheets, or in heaps of uncollected rubbish. Tensions have been such that the Takrori community, represented by their sheikh, has asked the Municipality to remove either group to a distant site - a bold plea, but for which they received the reply akhsorohom, i.e., ignore them!

When attention is turned to the existence of sub-divisions within minority group areas, it is found that this is a feature of areas 1 to 5, which harbour a mixture of people. Figure 9.11 shows these sub-divisions among their inhabitants, the basis of which is sub-tribal and tribal differences. Each group which is descended from particular ancestorship is concentrated as far as possible in one section of the

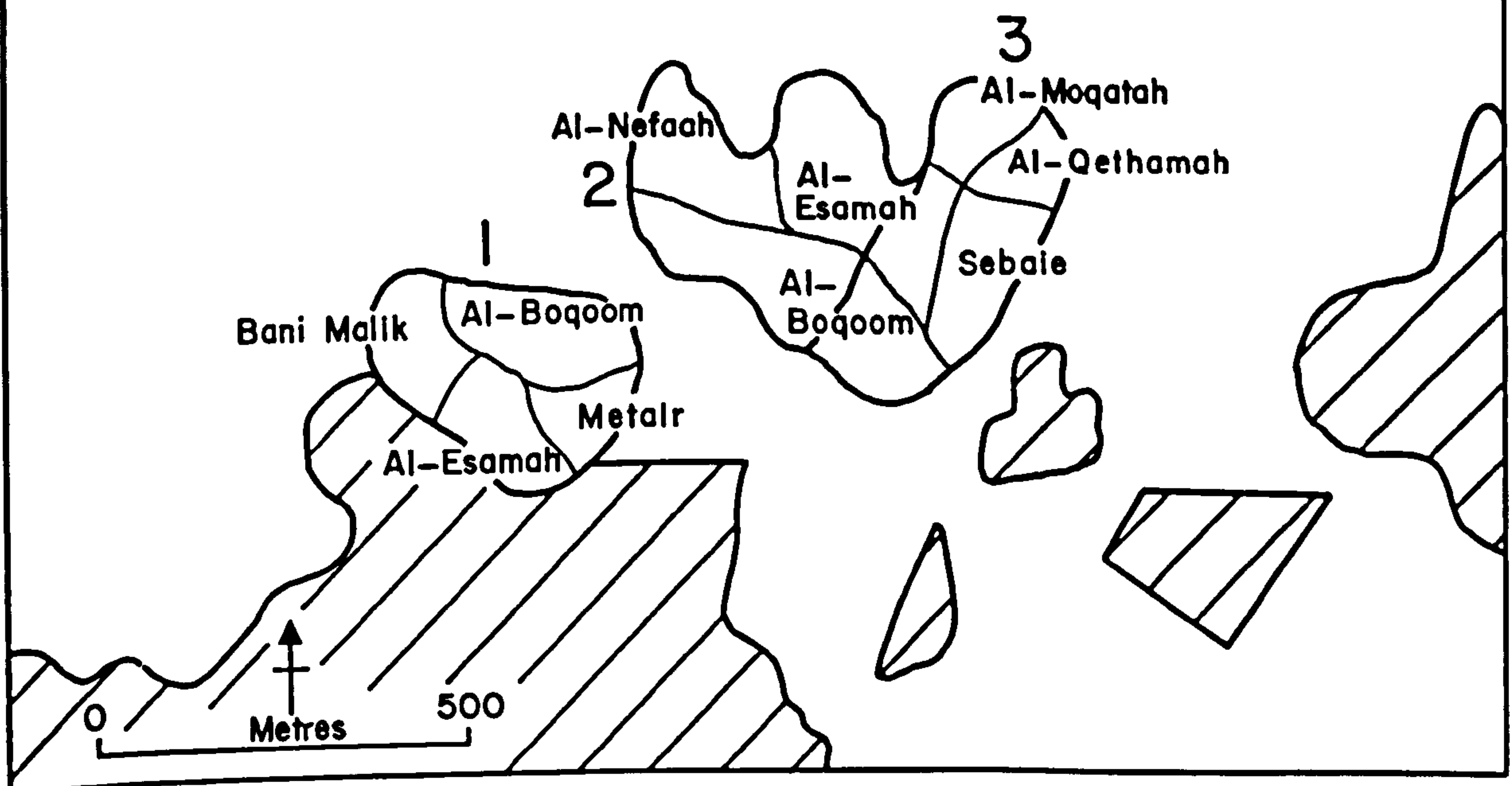
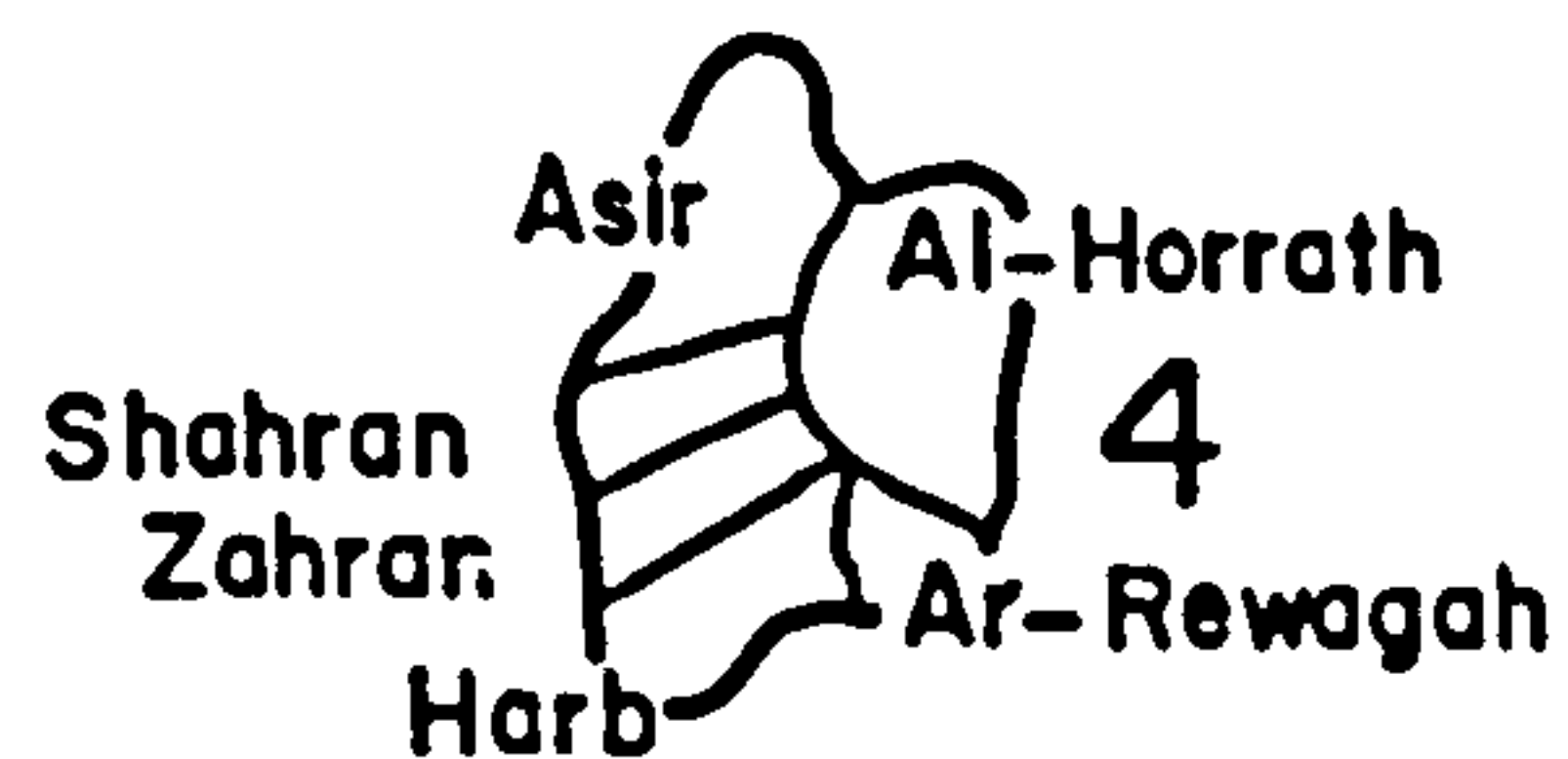
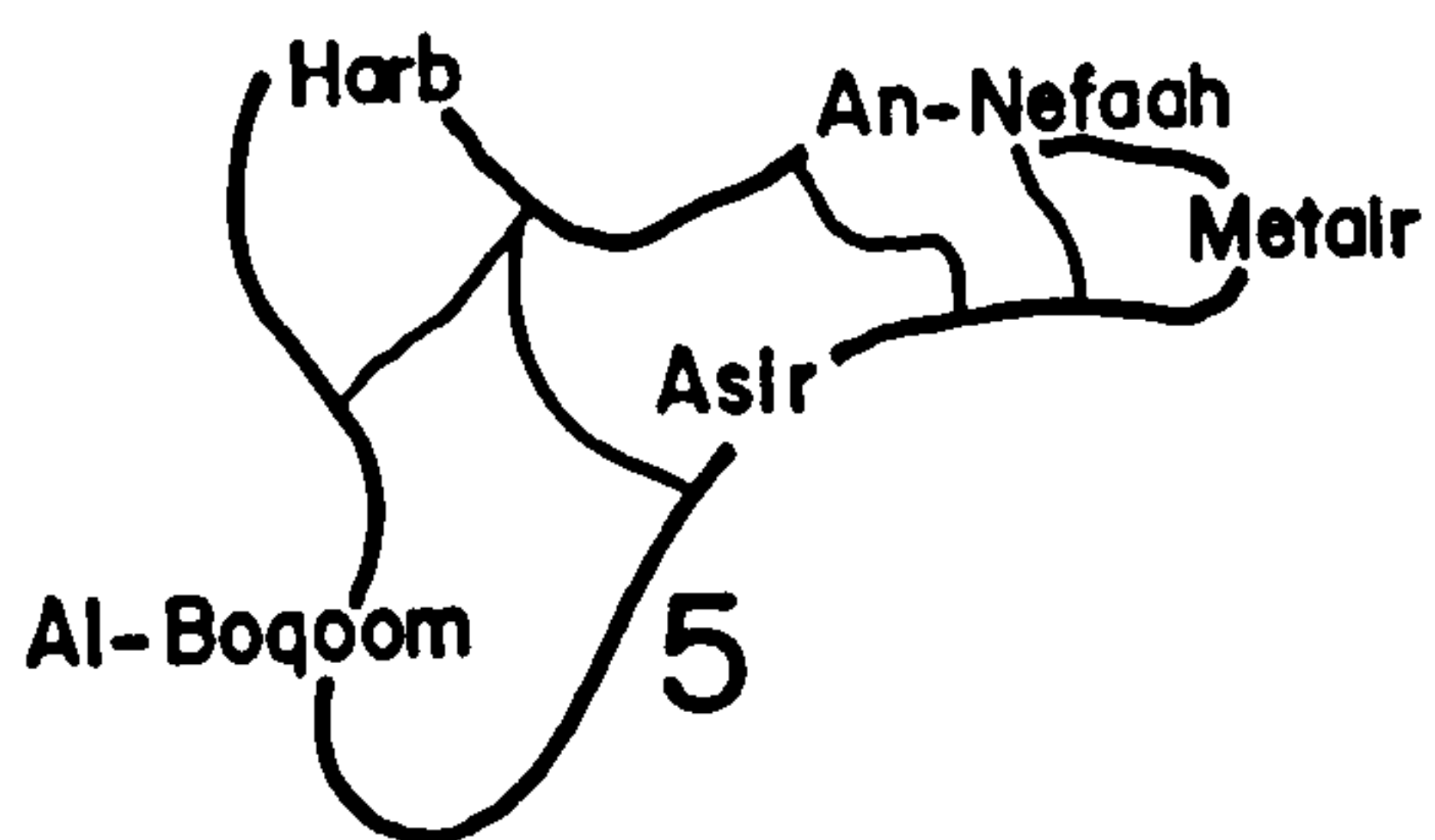
Fig. 9-11

Sub-divisions within migrant areas 1-5,
At-Taif city, 1975-76

(based on information supplied by these area's Nakeebs
and local chieftains, and Ains and Wells Department.)

 Built up
Areas

 Migrant
Areas



area. From this location they are characteristically forced to expand in a sectoral manner because of existing settlement of other communities, so that newcomers appear on the edges of these areas. This process is halted by the asphalt road, which is the boundary of land belonging to the Ministry of Defence and Aviation. Since newcomers have a markedly lower standard of living, including the poor quality of dwellings, the edges of the area are always strongly distinctive (see Plate 9.6 and compare it with Plate 9.4, of Bin Sowallem).

Areas 2 and 3, which used to be separate, have expanded towards each other, so that it is difficult now to define their exact original territory. This fusion was triggered by different Departments of the Ministry of Defence and Aviation allocating land to people in the same tribe in either of the two originally separate areas. As more newcomers to each area settled, the gap between the areas closed, with members of the same tribe attempting to unite with those on the fringes of the opposite side. This is exactly what happened to migrants from the tribe of Al-Boqoom, and the sub-tribe of Al-Esamah.

Although physical integration has occurred between adjacent areas 2 and 3, as stated in the two instances above, not all tribes and sub-tribes could do this. Lack of physical proximity and the very disposition of the sub-tribes will prohibit such an occurrence. Although internally sub-divided, the five areas (1 to 5) are still separated by some physical distance. This does not, however, prevent a high degree of social integration. It is appropriate, however, to add to what was said earlier about social contacts, that whenever a misunderstanding or a dispute has occurred between these sections of people



Plate 9.6

Compare this photo with Plate 9.4 of area 3; the above illustrates the shanty-like appearance of the edges of the area.
Page 324



Plate 9.7

Discarded nutshells in area 12. Page 328

or with others, then they all unite to resolve the problem in accordance with their own customs. Their local chieftain in At-Talf usually has to adjudicate; in a case of a failure, the tribe's chieftains are either invited to At-Talf, or they are visited by the disputing people; in neither case is the Government involved.

Finally, although area 12 accommodates both Nigerians and Malls, no sub-divisions were observed there. This is found to be related to the fact that these people regard themselves as one group, the Takrori (a large sect that extends from western Sudan to Senegal). It is also possibly related to the fact that such unity and solidarity provide them with more strength and dignity in the face of both host population and immigrant groups.

Comments on a Strategy for Minority Groups in At-Talf City

In the absence of any written policy relating to the affairs of minority groups, one could assume that their difficulties are allowed to run their course without interference. Although this would seem mostly to be the case, orders and decrees concerning these people have occasionally been made - but they are virtually ineffectual because they are too superficial and are not based on thorough investigations. Nevertheless, this restricted 'legislation' does seem to be opposed to discrimination as between native minority groups, and even to favour them compared to foreign minority groups. This could be illustrated by considering several examples, of which the following two appear to be the most appropriate. The first has been extracted from a royal letter (numbered 4160 and dated 15th May 1969), which expressed the

wish that territories belonging to a particular tribe should not be given the name of that tribe, and that the country (Saudi Arabia) should not be divided according to tribal territories, for there ought to be no differences between native citizens. The second example concerns frequently repeated marriage regulations : "The Ministry of Interior has called on citizens to observe the decisions passed by the Council of Ministers banning Saudis from marrying foreign wives, unless they obtain permission from the Minister of the Interior. Violations of these regulations means dismissal from Government posts, and in the case of students, their scholarships will be cancelled. The foreign wife will not be allowed into the Kingdom, and if she is a resident she will be asked to depart."¹⁵ Because of the recent statement of this position, so far there do not seem to have been any actual deportations.

It might be suggested that the provision of improved welfare services and amenities in the country's rural, semi-nomadic, and nomadic areas would help to retain more people in these areas, discourage migration to urban areas, and thus minimise the problems. Thus complexity of the minority group problems might be reduced, for it is affecting both the countryside (through, for example, depopulation) and the urban area (by, for example, reshaping its way of life). Yet, it is much better to prevent such problems arising than to let them develop and then search for a solution. Those who are still arriving in the city should not be compulsorily dispersed, nor settled in 'enclaves', until thorough investigations have been carried out. Above all, the needs and wishes of the people involved should be carefully

considered. This is a matter of great concern as long as we are dealing with people whose devotion to tribal regulations and principles is still quite vigorous. These statements, however, refer to native minority groups.

Foreign minority groups in At-Taif are not eligible for various Government aids - for example, the social security system, borrowing from the Saudi Credit Bank, or residence in Government housing project areas. The aim of the constraints is to preserve the Saudi 'special' way of life and prevent the gradual process of erosion. It is the writer's contention, however, that restricting the arrival of these people is a much more effective policy than letting them in and then not offering them equal opportunities. An appeal was made fairly recently by three leading religious men against the non-admittance of poor orphan non-Saudis and the needy into Social Service Centres, which are restricted to Saudis only. In order to prevent friction occurring through the mixing of natives with foreigners, the Council of Ministers suggested (letter No 378, dated 3rd March 1972) establishing a second Social Service Centre to serve foreign immigrants in need.

A member of a foreign minority group, in order to become eligible for the full benefits and advantages furnished to Saudis, often struggles to obtain Saudi nationality. It is regarded by most as a means, and not as an end in itself. This goes some way towards explaining why such people retain their original way of life and also reject full integration with natives. The extreme opposite, however, is witnessed in the case of those intending to settle permanently, for all ties and relations with the country of origin are severed and quickly forgotten. Both

groups, however, are faced with some degree of animosity from the host population, which is anxious about the effects of competition on their businesses and jobs.

Taking all the details into consideration, it must be concluded that At-Talf city affords little evidence that harmony or integration exists between its minority groups - native and foreign - or between either and the host population. Within their individual 'enclaves' meanwhile, signs of solidarity and retention of distinctive traits are easily observed. Several instances of this were seen when visiting these 'enclaves'. Firewood, for example, is still in dominant use by the native minority groups (Plate 9.4), although gas and kerosene are much cheaper. This simple practice illustrates the strong ties of these rural or semi-nomadic migrants to their original way of life. Another example concerns the songs and music the writer has heard in these areas; they are most noticeably 'bedouin' in tone and 'flavour'. Parallel instances were observed also in areas inhabited by foreign minority groups. The third example, which also struck the writer, concerned heaps of discarded nutshells found in area 12, inhabited by the group who originated in Nigeria and Mali (Plate 9.7). These nuts were grown in West Africa and imported especially to sell to the host population as roasted peanuts.

As Janet Abu-Lughod aptly stated, "with a lower capacity for assimilation, they tend to build for themselves within the city a replica of the culture they left behind".¹⁶ The city of At-Talf certainly does contain 'oases' inhabited by distinctive groups of people. These 'oases' may exhibit certain native, foreign, urban, or rural characteristics.

It seems unlikely that these differences will diminish so long as the present social policy remains unchanged. In areas so densely inhabited by minority groups, the process of creating exact replicas of the homeland shows no sign of losing momentum.

This fact, which the present study has elucidated (and which could be taken as a major finding of the present thesis) has very great importance for the city as a whole. Any administrative or planning authority concerned with At-Taif should obviously give very close consideration to the nature and existence of these distinctive minority areas, and the fact that they do not seem to be undergoing absorption. This is obviously a matter of very great importance for the future, not only in At-Taif, but, if paralleled elsewhere in Saudi Arabia, has extreme importance for all growing municipalities in the country. It is unfortunate that the position of the Chinese and Russian Moslems in At-Taif could not be examined - the American group is not likely to be other than transitory - but enough has been shown from the other communities, indigenous and foreign, to indicate the extent of what could be a significant problem.

REFERENCES

1. Central Department of Statistics, Ministry of Finance and National Economy, 1962-63 Census; and Robert Matthew, Johnson-Marshall and Partners, Socio-Economic Survey of Western Province, 1971
2. Lee, E S, A Theory of Migration, in Population Geography : A Reader, edited by Demko, J D, Rose, H M, and Schnell, G A, New York, 1970, pp 288-298
3. Haggett, P, Geography : A Modern Synthesis (second edition), New York, 1975, pp 490-491
4. Burgess, E W, The Growth of the City : An Introduction to a Research Project, in The City, edited by Park, R E, Burgess, E W, and Mackenzie, R D, Chicago, 1925, pp 47-62
5. Hoyt, H, The Structure and Growth of Residential Neighbourhoods in American Cities, Washington DC, 1939; and Hoyt, H, Recent Distortions of the Classical Models of Urban Structure, reprinted in According to Hoyt, Washington DC, 1966, pp 282-295
6. Harris, C D, and Ullman, E L, The Nature of Cities, in Annals of the American Academy of Political and Social Science, vol 242, November 1945, pp 7-17
7. See, for example, Herbert, D Urban Geography : A Social Perspective, Newton Abbot, 1972, Chapter 3; Carter, H, The Study of Urban Geography (second edition), Bath, 1975, Chapter 9; and Nelson, H J, The Form and Structure of Cities : Urban Growth Patterns, in Journal of Geography, vol 67, 1969, pp 198-207
8. Herbert, D, Urban Geography : A Social Perspective, Newton Abbot, 1972, p 153
9. Hoyt, H, The Structure and Growth of American Cities contrasted with the Structure of European and Asiatic Cities, reprinted in According to Hoyt, Washington DC, 1966, pp 245-250
10. Robert Matthew, Johnson-Marshall and Partners, Socio-Economic Survey of Western Province, 1971
11. Royal Decree, No 22, dated 13th September 1970
12. Robert Matthew, Johnson-Marshall and Partners, Socio-Economic Survey of Western Province, 1971

13. Brush, J E, Spatial Patterns of Population in Indian Cities, reprinted in The City in the Third World, edited by Dwyer, D J, London, 1974, p 113
14. Ibid, p 113
15. Saudi Review, No 2983, 13th June 1976, pp 2-3
16. Abu-Lughod, J, Migrant Adjustment to City Life : The Egyptian Case, in American Journal of Sociology, vol 67, 1961, pp 22-32

CONCLUSION

The main tasks of this conclusion are to indicate the generalities which have emerged from this work, and to provide what are believed to be the best recommendations for the future development of the Amirate, bearing in mind both its environment and the community.

Throughout this thesis we have been considering a unique region, the Amirate of At-Taif. The study has shown wide differences between the region and neighbouring regions, particularly those of Makkah and Jeddah : not only in natural environment, but also in settlement (pattern and nature), in population, and in economic life, as are surveyed in the four parts of this thesis.

Moreover, within the Amirate there is great variability; in all probability more than in other regions of similar size (7,290 sq km). One outcome is that it is possible to distinguish three different sub-regions within the Amirate : the uplands, the foothills, and the plain. Differences can be observed in the natural environment, with related differences in density of population, character of inhabitants, ties to the land, degree of natural fertility, and in many other ways. Although the physical environment may be regarded as to a considerable extent fostering these differences, human factors must not be forgotten. It is perhaps true to say that they are responsible for widening the basic inherent differences arising from environment. The differences between the semi-nomads of the plain and the rural peoples of the uplands and the foothills are related not only to the differences in environment but also to the different outlooks of the two peoples (although naturally

these factors interact).

In addition to these differences between the three sub-regions of the Amirate, they all differ from the city of At-Taif. This is the only urban area of the Amirate and is thus the centre for services and amenities. It provides better and more reliable ways of earning a living. The city is growing remarkably in area and number of inhabitants : indeed, only 16.2% of the At-Taif city householders in 1971 were born in the city, and the rural area (of the Asir and the Western Province) has provided At-Taif city with 28.6 % of its total population. The concentration of attention and investment on the urban area has made the rest of the Amirate relatively isolated and backward. Prompt action to preserve and ameliorate the rural and semi-nomadic way of life must be taken; for example, by encouraging the population to stay on the land, and by attracting others to settle. This could be achieved if these areas were provided with services and amenities which would improve the quality of life.

The city of At-Taif not only attracts rural and semi-nomadic populations of the Amirate, but also, because of its healthy and pleasant climate, a far wider range of people, including the Government of Saudi Arabia. It is the nation's summer resort, as well as the summer capital of the Kingdom. One major result is that the scale of its services has become national, and so more attention now needs to be given to the appearance, layout, services and amenities of the city.

On a wider scale, At-Taif city has attracted many foreign immigrants (25% of the total population in 1971). They have settled here not just because of the availability of work and attractive climate, but

also because of nearness to the holy city of Makkah (88km by road). It also contains the remains of the Prophet's cousin and companions (although these no longer attract immigrants to any significant degree). The continuous influx of immigrants has influenced the city's host population : for example, in food habits. But since immigrants (particularly those intending to settle) try to sever all ties with their homelands (among other things, to avoid persistent sarcasm) there is no cause to fear for the country's solidarity in the future, although these movements should be carefully controlled.

Despite such growth and change, the city of At-Taif remains distinctive in terms of its population composition, of the commercial activities, and so forth. In other words, it is not possible to find exactly similar urban areas. At-Taif still possesses, thanks to God, its own peculiar ethos and way of life; whereas, in a sense, cities such as Jeddah and Ar-Riyadh may be found almost everywhere on earth. As change is rapid and contagious, preservation of this ethos should be encouraged; for example, by keeping the suq traffic-free (unfortunately, the municipality has been trying for years to criss-cross the area with wide streets). The core of At-Taif city, with its few remaining traditional buildings and narrow alleys (including specialised commercial alleys), is the quintessential At-Taif, and should be preserved as such.

A final word is that this thesis, which is based on personal observation and investigation carried out in the field, has shown that our knowledge of the Amirate is neither wide nor deep. It has shown also that more attention should be given to the circumstances and

consequences of planning schemes and development studies. It is vital that what are believed to be suitable projects should be implemented under careful supervision based on knowledge and skills. Again, it is essential to protect the results of these plans, not only by simple and temporary methods such as guards and fences, but also by more positively rewarding and far-sighted methods of educating the public about the efforts expended in terms of labour, time and money.

Engaging the public (especially young men and youths) in summer and holiday programmes to improve the appearance of urban and rural areas would deepen their affection for the land, show them the amount of effort which has gone into development, and increase their responsibility towards building their country. Much could be achieved by introducing interesting educational programmes and advertisements in the press, on radio and on television : they would definitely raise the awareness of the public and increase respect for the Government's efforts to develop the country and improve the quality of life.

APPENDIX

The Questionnaire - English and Arabic Versions

The purpose of these questions is to further a study sponsored by the University of Ar-Riyadh, which aims to find out some ways of fostering real progress and development in this city. You will not suffer at all by answering these questions : your name will not be recorded. However, your help and co-operation is essential to our success.

NB : These questions are put to the head of household only.

1. What is your present nationality?
and the previous one, if you have changed nationality?
2. Were you born here? Yes
 No, where?
 (state village, town, region)
3. How old are you? less than 20 years 40-49
 20-29 50-59
 30-39 60 years or over
4. How long have you been married?
 unmarried 16-20
 less than five years over 20 years
 5-9 divorced
 10-15 widowed
5. How much is your wife related to you?
 same family same residential area
 same clan same country
 same tribe
6. How many children do you have? males females
7. When did you move to At-Taif? Year
8. What was your main reason for moving to At-Taif?
9. What was your work before you moved to At-Taif?
10. What is your work now?
11. When did you move to this house? Year
 (state residential area)
12. Where have you been living before? In the residential area of
13. Why did you move to this residential area?
14. Would you prefer to move to another residential area?
Yes, to the residential area of No, because

بسم الله الرحمن الرحيم

ان الفرض من توجيه هذه الاسئلة هو تمييز للدراسة التي تتبناها جامعة الرياض
للتمكن من الحصول على الوسائل التي تساعد على تطوير وتقدم هذه المدينة . اننا نأمل
مسامحتك ومعاونتك في الاجابة على هذه الاسئلة لنضمن أفضل النتائج .
ولا ضرر عليك في اجابتها طالما أن اسلك لن يضر .

ملاحظة : هذه الاسئلة موجهة الى رئيس أو رئيسة
السكن فقط .

- ١- ماهي جنسيتك الحالية ؟ :
- والسابقة ان وجدت ؟ :
- ٢- هل أنت مولود هنا ؟ : نعم لا
- اذا أين ولادتك ؟ (حدد القرية / المدينة / المنطقة)
- ٣- كم عمرك ؟ أقل من ٢٠ سنة ٤٠ - ٤٩
٢٠ - ٢٩ ٥٠ - ٥٩
٣٠ - ٣٩ ٦٠ سنة أو أكثر
- ٤- كم مضى على زواجك ؟ لم أتزوج ١٦ - ٢٠
أقل من خمس سنوات أكثر من ٢٠ سنة
٥ - ٩ مطلق
١٠ - ١٥ أرملة
- ٥- هل زوجتك / أو زوجك من : عائلتك نفس الحي
عشيرتك نفس القطر
قبيلتك
- ٦- كم عدد أطفالك ؟ ذكور : أناث :
- ٧- اذا لم تكن من مواليد الطائف فمتى انتقلت اليها ؟ عام :
- ٨- لماذا انتقلت الى الطائف ؟ :
- ٩- ماهو عملك قبل انتقالك للطائف ؟ :
- ١٠- ماهو عملك الآن ؟ :
- ١١- متى انتقلت الى هذا المنزل ؟ عام : (اذكر الحارة)
- ١٢- أين كنت تسكن قبل ذلك ؟ : في حارة :
- ١٣- لماذا انتقلت الى هذه الحارة ؟ :
- ١٤- هل تفضل الانتقال الى حارة أخرى ؟ نعم : الى حارة : لا : اذا لماذا ؟ :

BIBLIOGRAPHY OF WORKS ON AT-TAIF AMIRATE

Abdullah, Memories of King Abdullah of Transjordan, edited by Graves, P P, London, 1950

Abdul-Majid, H, A Malay's Pilgrimage to Mecca, in Journal Malayan Branch Royal Asiatic Society, vol 4, No 2, 1926, pp 269-287

Abo Al-Ola, Geography of the Arabian Peninsula, vol 1, Saudi Arabia, Cairo, 1965 (Arabic)

Ad-Dabbagh, M M, The Arabian Island, Beirut, 1963 (Arabic)

Ajlan, M D, The Change of the Makkah - At-Taif Road and its Effect on Nearby Settlements, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1969-70 (Arabic)

Al-Aameli, M D, Kashf Al-Irtiyab fi Atba Mohammad Ibn Abdel-Wahab, Damascus, 1927-28 (Arabic)

Al-Andolasi, A A, Mojam ma Astajam min Asma Al-Bilad wa Al-Mawadi, 4 vols, Cairo, 1945-51 (Arabic)

Al-Barakati, S A, Ar-Rihlah Al-Yamaniyah, Cairo, 1912 (Arabic)

Al-Batnoni, M L, Ar-Rihlah Al-Hijaziyah, Cairo, 1910 (Arabic)

Al-Fakehi, A, Okood Al-Lataif fi Mahasin At-Taif, about 1574 (Manuscript, Arabic)

Al-Fayroz Aabadi, M, Ahasin Al-Lataif fi Mahasin At-Taif, about 1415 (Manuscript, Arabic)

Al-Fayroz Aabadi, M, Fasl Ad-Dorra min Al-Kharazah fi Fadhl Karyat As-Salamah ala Al-Khobzah, about 1415 (Manuscript, Arabic)

Al-Hadhrawi, A, Al-Lataif fi Tarikh At-Taif, about 1905 (Manuscript, Arabic)

Al-Hamdan, S, and others, Survey of At-Taif's Hemas, At Taif, 1935 (Manuscript, Arabic)

Al-Hamadani, Sifat Jazirat Al-Arab, Cairo, 1953 (Arabic)

Al-Hosaini, A, Survey of At-Taif's Hemas, Ar-Riyadh, 1963 (Manuscript, Arabic)

Al-Jasir, H, The Country of At-Taif and its Historians in Al-Arab Magazine of Ar-Riyadh, vol 2, Nos 1 and 2, 1967, pp 1-15 and 97-101 (Arabic)

Al-Jondi, A H, and others, Electricity in Saudi Arabia, BA Dissertation, Department of Accounting, University of Ar-Riyadh, 1967-68 (Arabic)

Al- Kanawi, M, Risalah fi Fadhael Abdellah Ibn Abbas wa Fadhael At-Taif, about 1731 (Manuscript, Arabic)

Al-Kari, A, Risalah Mokhtasarah min Arbaa Twarikh, about 1890 (Manuscript, Arabic)

Al-Kazweeni, Z, Aathar Al-Bilad wa Akhbar Al-Ibad, Beirut, 1960 (Arabic)

Al-Khateeb, M, Baad Al-Kitabat Al-Athariyah fi At-Taif in Al-Makalah As-Salafiyah, vol 2, No 3, March 1918 (Arabic)

Allred, B W, Range and its Management in Saudi Arabia, Ar-Riyadh, 1970

Al-Mayorki, A, Bohjat Al-Mohtaj fi Baadh Fadhael At-Taif wa WiJJ, about 1280 AD (Manuscript, Arabic)

Al-Ojaimi, H, Ihda Al-Lataif min Akhbar At-Taif, Makkah, about 1878 (Manuscript, Arabic)

Al-Shalash, A H, Rainfall Maps of the Kingdom of Saudi Arabia, Ar-Riyadh, 1973

Al-Yasoe, F, Min Ramdha Makkah ela Masyaf At-Taif In Al-Machriq, vol 26, 1928, pp 650-661 (Arabic)

Anon, Russian Pilgrims to Mecca in The Muslim World, vol XLIV, No 2, April 1954, pp 154-155

Antonius, G, The Arab Awakening, London, 1945

Arabian American Oil Company, Aramco Handbook, Dhahran, 1968

Arabian American Oil Company, Preliminary Groundwater Report of Taif and Wadi Fatimah, Hijaz, Saudi Arabia, Dhahran, 1948

Arslan, S, Al-Irtisamat Al-Litaf fi Khatir Al-Hajj ela Akdas Mataf, Cairo, 1930 (Arabic)

As-Salami, A, Jibal Tihamah wa Sokkanaha, Cairo, 1953 (Arabic)

Attar, A A, AlKharj and Ash-Sharie, Cairo, 1946 (Arabic)

Azam, A, Rehlat Abdel-Wahab Azam, Cairo, 1951 (Arabic)

Azam, A, Site of Ukaz, Cairo, nd (Arabic)

Az-Zirikly, K, Ma-Raait wa Sa-met, Cairo, 1923 (Arabic)

Badawi, H M, Modern Agriculture in Saudi Arabia, Cairo, 1950 (Arabic)

Baumer, M, Scientific Research Aimed at Developing the Arid Zone of Saudi Arabia, Paris, 1964 (Manuscript)

Bhutta, M A, Groundwater Potentialities of the Eastern Al-Hada Area, Taif District, Jeddah, 1968

Bilainkin, G, Cairo to Riyadh Diary, London, 1950

Bin Ladin, M, The Road of At-Taif, Makkah, 1965 (Arabic)

Bin Mahfooz, A A, Al-Hada Agricultural District, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1969-70 (Arabic)

Bin Zahirah, J, Al-Jame Al-Latif fi Fadhl Makkah was Ahlaha wa Bina Al-Bait Ash-Sharif, Cairo, 1938 (Arabic)

Borno, K, Sowyd, S, and Allred, B, Woodlands in Saudi Arabia, Ar-Riyadh, 1966 (Manuscript)

Boshnak, A O, Ad-Dalil Al-Aam Li Al-Mamlakah Al-Arabiyyah As-Saudiyyah, Cairo, 1957 (Arabic)

Boylan, F T, Taif, city of Colour, in Aramco World, vol 18, No 4, 1967, pp 35-37

Brown, G F, and Jackson, R O, The Arabian Shield, in International Geologic Congress, vol 21, part 9, 1960, pp 69-77

Brown, G F, Geomorphology of Western and Central Saudi Arabia, in International Geologic Congress, vol 21, part 21, 1960, pp 150-159

Burckhardt, J L, Travels in Arabia, 2 vols, London, 1829

Carruthers, D, and Schwarz, E, A New Gazelle from Central Arabia, in Proceedings of the Zoological Society of London, vol 105, 1935, pp 154-156

Central Department of Statistics, Ministry of Finance and National Economy, Census of Population (Ar-Riyadh, Makkah, Jeddah, Al-Madinah, At-Taif), Ar-Riyadh, 1963 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Census of Buildings and Population, Ar-Riyadh, 1963 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Distribution of Saudi Arabia's Cities and Villages according to Size, Ar-Riyadh, 1964 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Sample Survey of Population, Ar-Riyadh, 1966 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Census of Establishments in the City of At-Taif, Ar-Riyadh, 1967 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Census of Establishments in the City of At-Taif, Ar-Riyadh, 1971 (Arabic)

Central Department of Statistics, Ministry of Finance and National Economy, Statistical Yearbook, 9 vols, Ar-Riyadh, 1965-1973

Central Planning Organisation, Economic Report (1967-68), Ar-Riyadh, 1969

Central Planning Organisation, Development Plan (1970-1974), Ar-Riyadh, 1970

Central Planning Organisation, Achievements of First Five-Year Plan (1970-1974) in News from Saudi Arabia of Jeddah, vol X, Nos 493, 495, 496 and 500, January-March, 1974

Davidson, D F, Two Visits to Saudi Arabia : A Report, Ar-Riyadh, 1965 (Manuscript, Arabic)

Davis, R, and others, Waters of At-Taif City, Ar-Riyadh, 1960 and 1962 (revised) (Manuscript, Arabic)

De Gauiry, G, Arabia Phoenix, London, 1946

De Gauiry, G, Faisal, King of Saudi Arabia, London, 1967

Directorate General of Girls' Education, General Statistics (1967-71), Ar-Riyadh, 1972

Doughty, C M, Travels in Arabia Deserta, 2 vols, London, 1936

Doxiadis, Development Plan for Municipalities (1970-75), Ar-Riyadh, 1970 (Arabic)

Draz, O A, Agricultural Development in Saudi Arabia, Ar-Riyadh, 1965 (Arabic)

Draz, O A, Range and its Improvement in Saudi Arabia, Ar-Riyadh, 1965 (Arabic)

Draz, O A, The Ancient Hema System of Range Reserves in the Arabian Peninsula, Ar-Riyadh, 1964 (Manuscript, Arabic)

Durozoy, G, Groundwater Survey of Wadi Al-Qaym, Jeddah, 1968

Durozoy, G, The Haddah Area : Groundwater Supply, Jeddah, 1968

Fattah, A A, Wadi Liyyah, A Geographical Study, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1969-70 (Arabic)

Filali, A, Moshro Tawteen was Tahdheer Al-Jamaat Al-Badawiyah fi Al-Mamlakah Al-Arabiyyah As-Saudiyyah, 1964 (Manuscript, Arabic)

General Meteorological Department, Meteorological Data (1961-73), Jeddah, 1961-73

Ghandorah, A, and others, At-Taif Region, At-Taif, 1970 (Manuscript, Arabic)

Goldsmith, R, Mineral Resources of the Southern Hijaz Quadrangle, Kingdom of Saudi Arabia, in Mineral Resources Bulletin 5, Directorate General of Mineral Resources, Jeddah, 1971

Goldsmith, R, and Kowther, J, Notes on Field Trips to the At-Taif - Bilad Zahran Area, Saudi Arabia, Technical Letter No 47, Saudi Arabian Mineral Exploration, Jeddah, 1966

Hajrah, H H, Possibilities of Agricultural Potential in Saudi Arabia, Ar-Riyadh, 1972 (Arabic)

Hamzah, F, Al-Bilad Al-Arabiyyah As-Saudiyyah, Makkah, 1936 (Arabic)

Hamzah, F, Kalb Jazirat Al-Arab, Makkah, 1933 (Arabic)

Hasan, H, At-Taif, in Kafilat Az-Zait, vol 17, No 4, June-July 1969, pp 25-34 (Arabic)

Haikal, M H, Fi Manzil Al-Wahi, Cairo, 1952 (Arabic)

Henaish, Y P, and others, Study of At-Taif's Water Resources, Ar-Riyadh, 1962 (Manuscript, Arabic)

Hogarth, D G, The Penetration of Arabia, London, 1904

Hosain, A, Studies on At-Taif, Jeddah, 1964 (Manuscript, Arabic)

Hosain, A, An Approach to Regional Planning in Saudi Arabia, Jeddah, 1968 (Manuscript, Arabic)

Ibn Abi As-Saif, M, Ziyarat At-Taif, about 1213 AD (Manuscript, Arabic)

Ibn Allan, M, Taif At-Taif fi Fadhl At-Taif, about 1638 (Manuscript, Arabic)

Ibn Allan, M, Jama Al-Lataif fi Mahasin At-Taif, about 1638 (Manuscript, Arabic)

Ibn Fahad, M, Tohfat Al-Lataif fi Fadhl Al-Hibr Ibn Abbas wa Wiji wa At-Taif, about 1547 (Manuscript, Arabic)

Ibn-Habeeb, Al-Monammaq fi Akhbar Koraish, Cairo, nd (Arabic)

Ibn Iraq, A, Nashr Al-Lataif fi Kotr At-Taif, about 1556 (Manuscript, Arabic)

Ibn Khamis, A, Al-Magaz bayn Al-Yamamah wa Al-Hijaz, Ar-Riyadh, 1970 (Arabic)

Industrial Studies and Development Centre, Obstacles to Industrial Development in Saudi Arabia, Ar-Riyadh, 1970

Industrial Studies and Development Centre, Survey of Industrial Establishments in Saudi Arabia, 3 vols, Ar-Riyadh, 1970

Industrial Studies and Development Centre, List of Factories up to January 1973, Ar-Riyadh, 1973 (Arabic)

Industrial Studies and Development Centre, The Quality of Solid Concrete Bricks, Ar-Riyadh, 1972

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 1, Surface Morphology, Mapping and Topographic Survey, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 2, Hydrologic and Climate Investigations, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 3, Geologic Investigations, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 4, Groundwater Investigations, 4 vols, Rome, 1968

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 5, Geophysical Investigations, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 6, Drilling Investigations, 2 vols, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 7, Surface and Groundwater Development, Rome, 1969

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 8, Town Water Supplies : Present Situation and Demand, Rome, 1967

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 9, Agronomic Investigations, 2 vols, Rome, 1968

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Specific Report No 10, Economic Evaluation of Agriculture, Rome, 1967 and 1969 (revised)

Italconsult, Water Supply Surveys for Jeddah-Mecca-Taif Area, Final Report, Rome, 1969

Italconsult, Socio-economic and Urbanistic Survey of Jeddah-Mecca-Taif Area, 10th November to 4th December 1967, Rome, 1968

Iterjee, A, Our Green Resorts : At-Taif and Ahha, Jeddah, 1967 (Arabic)

Jackson and Moreland, Barnamaj Tatweer At-Takah Al-Kahrabaeyah fi Al-Mamlakah Al-Arabiyyah As-Saudiyyah, Ar-Riyadh, 1963 (Manuscript, Arabic)

Jiabajee, N A, Saudi Arabia - Water Supply of Important Towns, in Pakistan Journal of Science, vol 9, No 5, September 1957, pp 189-201

Kahhalah, O R, Geography of the Arabian Peninsula, Cairo, 1964 (Arabic)

Kahhalah, O R, Mogam Kabael Al-Arab Al-Kadimah wa 'Al-Hadithah, 2 vols, Damascus, 1949 (Arabic)

Kalakattawi, M N, Crafts in At-Taif City, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1970-71 (Arabic)

Kamal, A, Tarikh At-Taif, about 1923 (Manuscript, Arabic)

Kamal, M S, Historians of At-Taif and their Works, in Al-Arab Magazine of Ar-Riyadh, vol 2, No 2, November 1967, pp 101-114 (Arabic)

Kamal, M S, Tribes of At-Taif, in Al-Arab Magazine of Ar-Riyadh, vol 2, No 5, February 1968, pp 338-421 and 430 (Arabic)

Kamal, M S, Wadi Nikhb and its Inhabitants, in Al-Arab Magazine of Ar-Riyadh, vol 1, No 6, March 1967, pp 515-523 (Arabic)

Karpoff, R, Esquisse Géologique de l'Arabie Séoudite, in Bulletin de la Société Géologique de France, vol 6, No 7, 1957, pp 653-697 (French)

Khaleef, M P, At-Taif, in Al-Arabi Magazine of Al-Kuwait, No 70, September 1964, pp 36-57 (Arabic)

Khojah, A, Wadi Mihrim, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1970-71 (Arabic)

Kowther, J, Preliminary Geologic Report on the At-Taif Area, Saudi Arabia, and an Approach to the Search for Tungsten, Technical Letter No 46, Saudi Arabian Mineral Exploration, Jeddah, 1966

Lammens, P H, La Cité Arabe de Taif, à la Veille de l'Hégire, in Mélanges de l'Université Saint-Joseph, vol 8, No 4, 1922, pp 115-327 (French)

Lawrence, T E, Seven Pillars of Wisdom, London, 1935

Lipsky, G A, Saudi Arabia, its People, its Society, its Culture, New Haven, 1959

Mansori, M A, Ash-Shafa District, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1970-71 (Arabic)

Martin, C, Preliminary Investigation of Cement Materials, Taif Area, Jeddah, 1969

Mattingley, P F, and Knight, K L, The Mosquitoes of Arabia, in Bulletin of the British Museum (Natural History) Entomology, vol 4, No 3, March 1956, pp 91-141

Meinertzhagen, R, Notes on Saudi Arabian Birds, in The Ibis, vol 91 1949, pp 465-482

Miles, G C, Early Islamic Inscriptions near Taif in the Hijaz, in Journal of Near Eastern Studies, vol 7, January-October 1948, pp 236-242

Ministry of Agriculture and Water, Agricultural Census of Western Province and Al-Madinah of 1962-63, Ar-Riyadh, 1964 (Arabic)

Ministry of Agriculture and Water, Forestry in Saudi Arabia, 1968 (Manuscript)

Ministry of Agriculture and Water, Range Management in Saudi Arabia, Ar-Riyadh, 1968 (Manuscript)

Ministry of Agriculture and Water, Hydrological Publications, Nos 1-47, 1966-73

Ministry of Education, General Statistics (1968-71), Ar-Riyadh, 1972 (Arabic)

Ministry of Interior, Land and Aerial Survey for four Saudi Arabian Towns (Mecca, Medina, Taif and Riyadh), Jeddah, 1960 (Manuscript)

Ministry of Interior, Report on At-Taif, Jeddah, 1964 (Manuscript, Arabic)

Ministry of Labour and Social Affairs, Census of Employees in Public owned Establishments of 1968, 3 vols, Ar-Riyadh, 1969 (Arabic)

Mokhtar, H, Mandeel, K, and others, Hemas of At-Taif, Ar-Riyadh, 1968 (Manuscript, Arabic)

Nallino, C A, Raccolta di Scritte, vol 1, L'Arabia Saudiana, Rome, 1939 (Italian)

Naseef, A O, The Geology of the Northeastern At-Taif Area, Saudi Arabia, PhD thesis, Department of Earth Sciences, University of Leeds, 1971

Naval Intelligence Division, A Handbook of Arabia, London, 1917

Naval Intelligence Division, Western Arabia and the Red Sea, Oxford, 1946

Okail, M F, Water Resources and Agricultural Expansion in Saudi Arabia, Alexandria, 1962 (Arabic)

Ozmerd, T, Events in Makkah and Taif, about 1920 (Manuscript, Ottoman Turkish)

Parsons Engineering Company, R M, Preliminary Report on Water Supply for City of Taif, Los Angeles, 1958 and 1969 (revised) (Manuscript)

Pasha, A H M, Midhat Pasha, 2 vols, Istanbul, 1907 (Ottoman Turkish)

Pasha, A S, Miraat Al-Haramain, 3 vols, Istanbul, 1886 (Ottoman Turkish)

Pasha, I R, Miraat Al-Haramain, 2 vols, Cairo, 1925 (Arabic)

Pasha, M S, Dalil Al-Haj Lil-Warid ela Makkah wa Al-Madinah min Kul fajj, Cairo, 1896 (Arabic)

Passports and Nationality Affairs, Pilgrim Statistics, 1970-74, 5 vols, Jeddah, 1970-74

Philby, H, A Pilgrim in Arabia, London, 1946

Philby, H, Arabian Days, London, 1948

Philby, H, Arabian Highlands, New York, 1952

Philby, H, Saudi Arabia, London, 1955

Philby, H, The Heart of Arabia, 2 vols, London, 1922

Raikes and Partners, Hydrological Service : Areas II, III, Jeddah-Mecca-Taif, and VIII, Final Report, Rome, 1971

Raikes and Partners, Investigations of Ancient Dams in the Taif Area, Rome, 1971

Rendel, G, Across Saudi Arabia, in The Geographical Magazine, vol 6, No 3, January 1938, pp 163-180

Robert Matthew, Johnson-Marshall and Partners, Alternative Urban Strategy (Jeddah, Taif, Yonbu), Western Province Plan, 1972 (Arabic edition)

Robert Matthew, Johnson-Marshall and Partners, Regional Framework, Western Province Plan, 1972 (Arabic edition)

Robert Matthew, Johnson-Marshall and Partners, Interim Report (Taif and Yonbu), Western Province Plan, 1971

Robert Matthew, Johnson-Marshall and Partners, Socio-economic Survey of Western Province, 1971

Rozi, M A, Water Resources in At-Taif Area, BA Dissertation, Department of Geography, University of Ar-Riyadh, 1969-70 (Arabic)

Rutter, E, The Holy Cities of Arabia, London, 1930

Sauti, City of Taif (Improvement and Beautification of Urban Streets), Phase 1, Preliminary Project, 2 vols and atlas, 1972

Smith, W R, A Journey in the Hejaz (1880), in Black, J S, and Chrystal, G (editors), Lectures and Essays of William Robertson Smith, London, 1912, pp 484-597

Sparrow, J G, Modern Saudi Arabia, London, 1970

Stanford Research Institute, Summary Report - Essentials of an Agricultural Development Plan for Saudi Arabia, California, 1971

Stanford Research Institute, A Plan for Development of the Agricultural Sector of Saudi Arabia, California, 1971

Stanford Research Institute, Evaluation and Use of Area Resources Surveys for Agricultural Development in Saudi Arabia, Special Report No 1, California, 1971

Stanford Research Institute, Improvement of Livestock Production by Bedouin Nomads on Semi-arid Rangelands of Saudi Arabia, Special Report No 2, California, 1971

Stanford Research Institute, A Program for the Improved Marketing of Agricultural Commodities in Saudi Arabia, Special Report No 3, California, 1971

Stanford Research Institute, A Synthesis of Policies to attain the Goals of the Agricultural Sector Plan for the Ministry of Agriculture and Water, Special Report No 4, California, 1971

Stitt, G, A Prince of Arabia, London, 1948

The Office of the Amirate of At-Taif, Names of Towns, Villages and Heads of Tribes, At-Taif City, 1970 (Arabic)

Town Planning Office, At-Taif, Jeddah, 1964 (Manuscript, Arabic)

Trott, A C, Notes on Birds seen and collected at Jedda and in Arabia during 1937, 1938, 1939 and 1940, in The Ibis, vol 89, 1947, pp 77-98

Twitchell, K S, Saudi Arabia, New York, 1958

Twitchell, K S, and others, Report on the US Agricultural Mission to Saudi Arabia, Cairo, 1943